DOCUMENT RESUME

ED 109 115 SP 009 365

AUTHOR Haynes, B. T.
TITLE Performance Based Teacher Education in the United States of America: A Report of the Claremont Teachers College Board.
PUB DATE Sep 74
NOTE 82p.; Not available in hard copy due to mariginal legibility

EDRS PRICE MF-$0.76 PLUS POSTAGE. HC Not Available from EDRS.
DESCRIPTORS Definitions; Literature Reviews; *Performance Based Teacher Education; *Performance Criteria; *Problems

ABSTRACT

This report on performance based teacher education (PBTE) begins with a consideration of the problem of a definition of PBTE since uncertainty and confusion have tended to result from a lack of clarity about what PBTE really is. In Chapter 2, the background of PBTE is surveyed and the intellectual, educational and political factors influencing the development of PBTE are identified. The main impetus to the PBTE movement, the 1968 Elementary Teacher Education Models, is examined in Chapter 3 to indicate the main features which are common to PBTE programs and which are specified in some details in the models. Chapter 4 presents the main features of the controversy over PBTE. The development of a list of teacher competencies, together with a means of evaluating the performance of students in teacher education programs in order to provide continuous feedback to students and administrators, is identified as the central feature of PBTE. The following are noted as factors that have led to the conclusion that PBTE should not be implemented at Claremont Teachers College: (a) the failure to produce either an adequate list of teacher competencies or an adequate means to measure such competencies as are identified, and (b) the lack of a well-developed theory which may give rise to expectations that research may succeed in producing an adequate list of competencies or an adequate evaluative instrument. (Author/JA)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED109115

PERFORMANCE BASED TEACHER EDUCATION IN THE UNITED STATES OF AMERICA: A REPORT TO THE CLAREMONT TEACHERS COLLEGE BOARD

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

B.T. HAYNES, M.A., B.ED(Hons)

September 1974

SP009 365

363 Education,
University of Illinois,
Urbana, Illinois 61801

19 July 1975

The Claremont Teachers College Board at its meeting of 7 July 1975 at Claremont, Western Australia resolved:

That permission be granted for you to release your Report P.B.T.E. in the U.S.A., providing the College is not involved in any expense.

The report is submitted without appendices as the material from which the appendices are selected is more readily available in the U.S.A. than in Australia and so there is less need to provide the background information.

Bruce Haynes

"To defend the need for performance-based teacher certification is much easier than it is to provide a precise definition of the concept. When one prominent teacher educator learned that the Florida Department of Education was planning to conduct a training program dealing with performance-based teacher certification, he responded cryptically, "It sounds like a good idea if you can figure out what it is." "

Daniel, L.F., "Performance-Based Teacher Certification: What Is It and Why Do We Need It?", in Burdin, J.L. and Reagan, M.T. (ed), Performance-Based Certification of School Personnel, ERIC Clearinghouse on Teacher Education and the Association of Teacher Educators, Washington, D.C., 1971, p.5

ACKNOWLEDGEMENTS

This report arose as a result of a conversation with Professor H. Petrie at the University of Illinois at Urbana-Champaign and his advice and assistance, together with the advice, assistance and supervision provided by Professor R.H. Ennis, are very much appreciated.

A number of people provided information and comments on Performance Based Teacher Education at conferences and in response to written requests and without their willing co-operation this report would not have been possible.

The stimulation and information derived from interviews with Professor H.S. Broudy and Professor B. Gardner, both at the University of Illinois at Urbana-Champaign and from interviews with Associate Dean, J. Cooper of the University of Houston, Texas and Professor E.J. Nussel of the University of Toledo, Ohio provided both direction and substance to this report and their kindness in providing time for these discussions is much appreciated.

The Claremont Teachers College Board provided some of the funds for this report and the remainder was provided by the writer.

CONTENTS

CHAPTER ONE PAGE

INTRODUCTION AND DEFINITIONS

Introduction 1
Definitions 2

CHAPTER TWO

THE BACKGROUND TO PBTE

Recent debates in teacher education 9
Factors influencing PBTE 11
Development of PBTE 18

CHAPTER THREE

MODELS OF PBTE

The 1968 Elementary Teacher Education Models 20
Aspects of sample PBTE 29
Certification 37
Comment 39

CHAPTER FOUR

THE PBTE DEBATE

The range of the debate 42
Extraneous issues 44
The rationale for PBTE 46
Competency identification 55
Innocuous or Mischievous 61

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Conclusions 65
Recommendations 69

APPENDICES

LIST OF REFERENCES

CHAPTER ONE

INTRODUCTION AND DEFINITIONS

> "The movement toward competency based or performance based education now permeates every aspect of American education. In particular, the education of professionals is being revamped through this movement. By fall 1972, seventeen states had devised teacher certification procedures based on the CBE/PBE concept." (Houston, W.R.,1974,p.3)

The promise of the great potential of Performance-Based Teacher Education (PBTE) for improving teacher education and the prevailing controversy over the desirability of implementing PBTE programmes seemed to be good reasons for undertaking the research upon which this report is based. The research which was undertaken is limited in that it was begun in November 1973 and continued intermittently until August 1974, does not cover all the literature on the subject but instead concentrated on what appeared most important or was available and did not include adequate visits to sufficient numbers of PBTE programmes which are in operation. The research did include attendance and discussion at the American Educational Studies Association Conference in Denver, Colorado (November 1973), at the American Association of Colleges of Teacher Education in Chicago, Illinois (February 1974) and at the Philosophy of Education Society Conference in Boston, Massachusetts (April 1974) as well as discussion with several of the educators closely associated with the PBTE movement.

The following report on PBTE commences with a consideration of the problem of definition of 'performance based teacher education' because uncertainty and confusion have tended to result from a lack of clarity about what PBTE really is. As the question of definition has not been adequately resolved, the tendency is for PBTE to be all things to all men. In Chapter Two, the background to PBTE is surveyed

and the intellectual, educational and political factors influencing the development of PBTE are identified. The main impetus to the PBTE movement, the 1968 Elementary Teacher Education Models, is examined in Chapter Three to indicate the main features which are common to PBTE programmes and which are specified in some detail in the models. Aspects of actual PBTE programmes which illustrate the manner in which PBTE has been implemented are also included in Chapter Three, as well as a discussion of the issue of teacher certification and PBTE. In Chapter Four an attempt has been made to present the main features of the controversy over PBTE and to indicate the level of debate being engaged in on this issue. The development of a list of teacher competencies, together with a means of evaluating the performance of students in teacher education programmes to provide continuous feedback of results to students and administrators, is identified as the central feature of PBTE. The failure to produce either an adequate list of teacher competencies or an adequate means to measure such competencies as are identified, together with the lack of a well developed theory which may give rise to expectations that research may succeed in producing either an adequate list of teacher competencies or an adequate evaluative instrument, has lead to the conclusion that PBTE should not be implemented at Claremont Teachers College. It is recommended that Claremont Teachers College investigate the possibility of acquiring the complete ERIC microfiche collection and undertake some fundamental research relevant to teacher education.

In this report, 'pupil' is used to refer to children in either a primary or secondary school, 'student' is used to refer to a person preparing to be a teacher and 'faculty' and 'staff' are used to refer to the professional staff in a teacher education programme or to teachers in schools.

Although 'Performance-Based Teacher Education' is the term used in this paper to refer to the movement to introduce certain kinds of innovations into teacher education in the U.S.A., there is some dispute over whether 'Competency-Based Teacher Education' is the more appropriate term to be used and, notwithstanding which term is used, some dispute as to what is to count as an instance of innovation that is consistent with the movement, however named.

Advocates of the term 'Performance-Based Teacher Education' emphasise that the use of 'performance' indicates that a central feature of the notion is that a student is required to demonstrate that he knows <u>how</u> to do what is required in the classroom rather than that he knows <u>that</u> such a performance is required in the classroom. Advocates of PBTE reject claims of knowledge for its own sake and non-observable cognitive skill and accept observable teaching performance as the measure of a teacher's competence. Those who favour 'Competency-Based Teacher Education' usually do so because they fear that the use of 'PBTE' would encourage mimicry and superficial role playing in student teacher's performances and so they see the use of 'competency' as a way of emphasising minimum standards of effective performance. A difficulty with the emphasis on acceptable criteria for performance is that, failing other means of determining the adequacy of a student's performance in the classroom, the student teacher will be assessed on the basis of the consequences of his action. In such a situation a student would be assessed on his success, or otherwise, in getting the pupils to learn what was being taught at that time. As "payment by results" has a long and disreputable record in educational history it would seem unwise to inflict it upon student teachers who are seeking to demonstrate their competence as teachers.

The AACTE Committee on Performance-Based Teacher Education (1974,p.11) believes

> "This conflict may be reconciled ... by recognizing that if one is pressed to define his terms, both concepts are necessary. Those who prefer PBTE do not claim that teacher education should be based on just any performance but on competent performance.... Likewise, those who prefer CBTE are not talking about competence in a limited pedantic sense but about competence in teaching performance.... The AACTE Committee decided to stay with its original title, largely for reasons of convenience and because it saw no compelling reason to change."

The position of the AACTE Committee on the matter of the title to be used is one which is generally accepted, in that while there are differences of emphasis among various writers on the topic it is these differences which tend to lead the writers to select one or other of the titles rather than the other way around. Little, if any, appeal is made in the writings on this topic to the performance rather than the competency base of the teacher education but rather the appeal is to the performance/competency base as opposed to an experience base that has been traditional in teacher education programmes. Nonetheless, the lack of a generally accepted title gives rise to some uncertainty as to the nature of the movement and this uncertainty is increased when a definition of C/PBTE is sought.

The AACTE Committee on Performance-Based Teacher Education (1974,p.8) says "The formula for performance-based instruction is deceptively simple: careful definition of performance goals in assessable terms and guidance of instruction by evaluation of learner performance." The Committee notes that the distinction between the performance-based instruction and other forms lies in the degree to which goals are made explicit and the rigour with which the evaluation is carried out in terms of those goals. In giving a more detailed definition, the AACTE Committee on Performance-Based Teacher Education (1974,p.7) states that

"the essential characteristics of any performance-based instructional program are

1. The instructional program is designed to bring about learner achievement of specified competencies [1] (or performance goals) which have been
   - . derived from systematic analysis of the performance desired as end product (usually that of recognized practitioners) and
   - . stated in advance of instructinn in terms which make it possible to determine the extent to which competency has been attained.
2. Evidence of the learner's achievement
   - . is obtained through assessment of learner performance, applying criteria stated in advance in terms of expected levels of accomplishment under specified conditions and
   - . is used to guide the individual learner's efforts, to determine his rate of progress and completion of the program and, ideally, to evaluate the efficiency of the instructional system and add to the general body of knowledge undergirding the instructional process.

The foregoing implies, of course, that

1. Instruction is individualized to a considerable extent.
2. Learning experiences are guided by feedback.
3. The program as a whole has the characteristics of a system.
4. Emphasis is on exit requirements.
5. The learner is considered to have completed the program only when he has demonstrated the required level of performance.
6. The instructional program is not time-based in units of fixed duration."

The nature of the relationship between the first two items in this definition and the remaining six items is not altogether clear. It may be that the first two items are a general statement of the essential characteristics and the remaining six items are specific implications to be drawn from the more general statement and that all eight items are together an exhaustive list of the essential characteristics of performance-based instruction. However, in the original statement of the essential elements of performance-based teacher education [2], the AACTE Committee included a list of six characteristics which are very similar to the six listed above and indicated that those characteristics were categorized as "implied". The point of describing these characteristics as "implied"

1. Note that the AACTE Committee on Performance-Based Teacher Education (1974,p.8) intended that 'competencies' did "not refer solely to discrete skills and descriptive knowledge but may include much more complex attributes such as the ability to marshal evidence, to reason logically, to appreciate beauty,etc."

2. See Appendix A

was stated to be that they were empirically based rather than theoretically based and that while they often accompanied PBTE programmes they were not to be regarded as essential characteristics of PBTE. It may well be that the six characteristics listed above as being implied by the essential characteristics of performance-based instruction are not themselves essential for a programme to be performance-based but only that they are often part of such a programme.

The definition of 'performance-based instruction' is applied by the AACTE Committee to the field of teacher education in the form of the December 1971 definition and the February 1974 revised definition presented in Appendix A . Given such definitions it should be possible to ascertain whether a particular teacher education programme fits the PBTE characteristics and what may be needed to alter a programme to fit those characteristics. To be able to use these definitions in this manner requires that the notions used in the definitions are clear and that other, different definitions of PBTE are materially equivalent to those formulated by the AACTE Committee. It seems that the notions used in the definition are not adequately clarified and the other definitions currently available in the field are not obviously materially equivalent to those provided by the AACTE Committee.[3] The main point of confusion and dispute is over 'competencies'. An example of a definition which embodies a differing use of 'competence' is that of Howsam and Houston (1972,p.5) which says, in part, "competency-based instruction is a simple, straightforward concept with the following central characteristics: (1) specification of learner objectives in behavioral terms;". The restriction of 'competence' to cover only such

---

3. This issue is dealt with in more detail in Chapter Four.

things as can be stated in behavioral objectives seems to be at variance with the most recent AACTE Committee definition[4] which specifically mentions attributes that are commonly taken to have defied attempts to state them in behavioral terms. The definitions which have been given of 'PBTE' have not, as yet, provided a clear, unambiguous means of identifying the central features of the notion underlying the PBTE movement nor of a reliable means of identifying programmes or parts of programmes that may be called performance-based.

The problem of lack of clarity and lack of detailed attention to conceptual issues is not limited to the attempts to provide a definition of 'PBTE'. The Elementary Teacher Education Models project[5] was seen as an attempt to construct teacher education programmes on the basis of some identified assumptions. In some of the models the writers specified some assumptions about future society and schooling in that society and some indicated a general conception of the teacher in future schools, e.g. as educational engineer or as a clinician, but few provided any detailed conceptual analysis of their central notions or definitions of key terms. Where this latter approach was adopted at all it fell far short of what is required if teacher education programmes and the specified competencies are to be derived from such analyses. An example of one of the few attempts to provide a definition of one of the central concepts used in the model construction, viz. 'teaching', is that given by the Michigan State University team and it is summarized as "Teaching ... is a rational process of taking account of the characteristics of a situation and the persons therein in order to carry out some intervening activity

---

4. See Appendix A.

5. These models are discussed in detail in Chapter Three.

which is thought to have a probability of inducing some intended change in the learner." (Houston, W.R.,1968,Vol.1,p.I-21) This definition does not provide a helpful point from which to derive a teacher education programme, or any part of it, without a definition of 'learner' which will help to overcome the objections to the definition of 'teaching' as it is given above. As it stands, the definition of 'teaching' includes as examples such nonexamples as an instance of assassination. No definition of 'learner' was given in the Michigan State University model which was itself rather unusual in its inclusion of 'teaching' in its list of definitions.

The issue of the inadequacy of definitions and the failure of teacher education programme designers to undertake extensive conceptual analysis may seem to be of minor importance but this is not the opinion of some of those who have been involved in the PBTE movement.[6] H.E. Bosley (1969, Vol.II,p.164) includes the claim that

> "No comprehensive theoretical base exists for teacher education in general, or for the laboratory phases of teacher preparation, as an example of one of the most severely limited areas from this standpoint."

The PBTE movement is seen by some of its participants as an attempt to develop the theoretical base for teacher education and to provide a systematic teacher education programme derived from that theoretical base. However, despite the PBTE emphasis on explicit conceptions of teacher roles, Rosner and Kay (1974,p.291) claim

> "That competency-based teacher education has come to mean so many things to so many different people is probably the single most serious issue confronting the competency-based movement at present. If this issue is not resolved shortly.... the real promise of CBTE is unlikely to be realized. It will be washed away, ironically, by currents of ambiguity."

---

6. Schalock, H.D., (1974,p.2) says "the definition of competency adopted by a state or program shapes all else."

CHAPTER TWO

THE BACKGROUND TO PBTE

RECENT DEBATES IN TEACHER EDUCATION

During the past two decades there have been a number of debates about the improvement of teacher education in the USA and these debates have taken place in the context of two differing traditions of teacher education. One tradition stressed the mastery of pedagogical methods and was associated with the normal schools and the preparation of teachers for the elementary schools. The opposing tradition in teacher education stressed the need for rigorous academic training which was usually provided by liberal arts colleges and universities for secondary school teachers.[7]

In the 1950's, particularly in the larger universities, there were attempts to have the Colleges of Education disbanded, on the grounds that they lacked academic rigour, and to transfer the responsibility for teacher training to other, more rigorous, departments of the universities. In the latter part of the 1950's, the quality of teacher education programmes was again questioned as part of the general reaction to the Sputnik scare.

The most widespread controversy among teacher educators arose from the suggestions made by Conant (1963) who wished to instigate "a vigorous national debate among educators and laymen on the question of how to educate the teachers of American youth." (Weiss,R.M.,1969,p.6)

---

7. For accounts of developments in teacher education in the USA see Richardson,J.A. and Bowen, J.,(1967,pp.131-147), Stinnett, T.M., (1969,pp.383-437) and the Encyclopedia of Educational Research (1969).

The debate continued until 1966 but Conant was disappointed with the tangible changes resulting from the debate. Few institutions altered their programmes to implement Conant's recommendations but the book did stimulate some experimentation in the field of teacher education. The debate between supporters of the two differing traditions in teacher education "was marked by strong differences of opinion by those committed to opposing conceptions, but neither two-way dialogue nor two-way debate developed. Ideas were expressed unilaterally, with little or no exploration of the differences." (Weiss, R.M.,1969,p.6) The quality of the debate over Conant's views is similar to the debate over PBTE although the debate is quantitatively different in that, in addition to the two opposing views expressed in the earlier debates, there is now the additional group who support humanistic teacher education.[8] Of this latter group, Broudy (1974,p.77) says

> "The humanistic point of view, it seems to me, originated in the dissatisfaction of the minorities with the schooling their children got, on the ground that it was designed for the middle class establishment and was therefore antithetical to their needs."

The central notion of this humanistic tradition is that what is needed is a teacher who can "relate" to the children rather than one who can perform some specified act or who has undertaken a period of academic study.

Some of the supporters of PBTE refer to it as <u>the</u> current reform movement in teacher education in the USA and, despite the criticisms of both opponents of PBTE and researchers involved in developing the theoretical support required for PBTE, there has been a major move to implement PBTE programmes throughout the USA.[9] The rush

---

8. For accounts of humanistic teacher education see Nash,P.,(1973) and the writings of A.W. Combs.

9. See Appendix B

to implement PBTE programmes may be a reaction, in part, to immediate political pressures but it may also be a result of the frustration of reformers in teacher education who failed to see any significant changes occur as the result of two decades of debate.

FACTORS INFLUENCING PBTE

PBTE has developed under the influence of a number of factors which will, for reasons of convenience, be grouped under three headings: Intellectual, Educational and Political. The intellectual factors include the emphasis on objectives, the development of models of teaching and issue of accountability. From the work of such people as Mager (1962) and Bloom, et.al., (1965) has come the emphasis on identifying objectives and particularly on identifying the objectives in behavioral terms. The specification of such objectives is seen by most of the educators concerned with PBTE as the central feature of the whole movement. The second major intellectual factor is the attempt to develop models of teaching as the basis of teacher education, instead of concentrating on psychological theories of learning as has been the practice for the past few decades. The work on models of teaching has been influenced by the work of people such as Flanders (1970), Gage (1963,1973), Smith (1967) and Joyce and Weil(1972). The third intellectual factor is that of accountability which has been taken over from business management and promoted in education circles by writers such as Lessinger (1970).[10] The promotion of the ideas associated with the work on models of teaching, the drive for accountability and the

---

p.111)

10. Note that, more recently, Lessinger (1974, has said "Much of what has passed for 'accountability' in the past years is stuff and nonsense.... What we can be held accountable for is professional competence, confidence gained through teaching experience, and caring for the people we teach."

for specification of objectives in behavioral terms, has given the teacher education community a sense that it is possible to approach the task of teacher education in a manner somewhat different from that to which they are accustomed.

Under the heading of educational factors are grouped the following issues which are related to PBTE: Field Based Teacher Education, Educational Technology and Inservice Teacher Centres. The fact that students lacked the opportunity to gain teaching experience in schools at an early stage in the teacher education programme has been perceived as a weakness of teacher education in the USA and the Association of Teacher Educators (ATE) and its predecessors have actively sought closer links between teacher education programmes and the schools. The implementation of PBTE programmes has often been used as an opportunity to provide the desired integration of schoolroom experiences and college study. The development and application of audio-visual aids, programmed instruction by means of books and computer-assisted instruction in schools and universities has lead to calls for the application of these and similar forms of educational technology to teacher education. The idea is that a teacher education programme is to be devised around these innovations rather than the educational technology be utilised only where it fits into an existing programme. While the educational technology has provided some impetus to the PBTE movement, the lack of suitable software has limited the effectiveness of attempts to implement PBTE programmes. The third educational factor which has an influence on PBTE is that of inservice teacher centres. Although the American Association of Colleges of Teacher Education (AACTE) began studies of teacher centres some twenty-five years ago, the recent enthusiasm for the idea has drawn much of its inspiration from Britain. Since 1966, when the AACTE undertook studies for the

United States Office of Education (USOE) which resulted in the publication of Teachers for the Real World by B.O. Smith, et.al. (1969), the teacher centre idea has been actively promoted. In 1970 the Bureau of Educational Personnel Development established the Task Force '72 and one of its tasks was the study of teacher centres and the dissemination of information about these centres. Other groups including the NEA, AFT, Ford Foundation and the National Association of Independent Schools carried out workshops and pilot studies on teacher centres. Some states, including Texas, California, Florida and Vermont havelegislated regarding teacher centres and other state education departments support the development of teacher centres. The teacher centre movement has been the most accepted of the recent attempts at innovation in teacher education[11] and those supporting PBTE have not sought to separate themselves from this educational factor. A difficulty with PBTE is to separate out what is distinctively PBTE and what is contributed by the three educational factors discussed above. Those who advocate the implementation of PBTE are likely to appeal to a number of its features including the increased emphasis on field-based approach, the widespread use of new educational technology and the creation of teacher centres for inservice teacher education. The educational factors identified in this section of the report lend support to the contention that teacher education as it has been carried in the USA should be modified and the PBTE movement is able to use both the expectation of change and the proclaimed virtues of the educational factors to advance its case. The combination of the intellectual factors and the educational factors is such that the impression may be created that the means for a radical, significant change to improve teacher education are now available. The proponents of PBTE

11. See Houston and Howsam (1972,p.180) and Schmieder and Yarger (1974,p.5)

have sought to give that impression.

Apart from inspiring teacher educators to develop and implement PBTE programmes, the Federal and State educational authorities can wield the force of certification of teachers as a means to influence the type of programme to be offered. The third of the factors influencing PBTE is the Political Factor and under it shall be considered the roles of the Federal government and the State governments as carried out by their educational agencies, the role of the professional teacher education organisation at the Federal level (AACTE) and the role of organised teachers (NEA and AFT) at the Federal and State levels.

The role of the USOE has changed from being the auditor and bookkeeper of US education to that of instigator of change in education and facilitator and partner with the State education departments in education in USA. The USOE has established a set of priorities in its programmes and through its agency, the National Institute of Education (NIE), can direct research funds into the study related to the established priorities. The rationale for this direction of research funds is that it provides a co-ordinated and systematic attack on a particular important educational problem. PBTE is one of the projects which has received the support of Federal funding as will be indicated below. The influence of the USOE has not only changed in the funding of research but also in the scope of its activity. In 1963 the USOE had two small educational programmes and by 1970 it had 30 programmes. The Federal influence on education was expanded by the Higher Education Act of 1965 and further added to by the Educational Professional Development Act of 1967. These Acts

either created or facilitated the establishment of programmes including the Teacher Corps, Task Force '72, the Educational Resources Information Center (ERIC) Clearinghouses, the Multi-State Consortium of Performance Based Teacher Education and the Elementary Teacher Education Models. All these programmes have had some impact on the PBTE movement and through them the influence of the USOE has been considerable.

The increasing influence of the USOE has assisted the State educational agencies in increasing their influence over education at all levels in the states. The most common means by which the USOE enhances the power of the state educational agencies is by having the State implement educational changes in the particular state. The means by which States are able to influence colleges to implement PBTE is by establishing certification procedures based on PBTE,[12] and aided in this regard by the National Council for Accreditation of Teacher Education (NCATE). Whether the greater involvement of State and Federal agencies in teacher education is seen as an additional form of assistance to the teacher education institutions or as a takeover of power such that the teacher education institutions are more under the control of those agencies, depends in part on how far the legislative requirements are extended and in part on how the funds for research and development for education are directed to specific projects. However, various factors are combining to reduce the interest, particularly of the Federal government, in teacher education and these factors include the "surplus" of teachers, the lack of student unrest, the decline in interest by public and government alike in higher education in general and the

---

12. See Kirst, M.W., (1973) and Appendix C.1

overall reduction in "real" funds for education in general. The reduction of governmental interest in higher education, and teacher education in particular, is evident in the lack of funding for the implementation of any of the 1968 Elementary Teacher Education Models. The so-called "taxpayers revolt" against education may be thought to be to the advantage of PBTE if, because it is more efficient than the traditional programmes, PBTE costs less than the already finance-starved teacher education programmes. Another possible reaction to the lack of funds for education is the increase of class sizes and an even greater teacher "surplus", leading to a rapid decline in enrollments in teacher education programmes. This decline in enrollments is evident at present and in cases where the decline in enrollemnts and financial difficulties are severe it results in the closing of the institution (if it is a small private college) or a severe reduction in staff, including tenured staff.[13] For a college facing emaciation or elimination, PBTE may seem to be a means of survival. For the small private colleges which are forced to close, it may seem as though the State education system, supported by taxes, is taking over higher education and rendering teacher education more vulnerable to political pressure.

At the national level, the AACTE acts as a disseminator of information on PBTE, among other things. The AACTE fulfils this role by being a co-sponsor of the ERIC Clearinghouse on Teacher Education with the NEA and the ATE (an affiliate of the NEA), by publishing the PBTE Series and by carrying out various seminars and workshops on PBTE.

At the state level, teacher organisations affiliated with the NEA and the AFT are involved in various ways with PBTE. The concerns

---

13. See Appendix C.2

of teacher organisations concerning PBTE arise out of the issue of accountability of teachers in the schools and out of certification of teachers. The activities of teacher organisations vary with the strength and interests of the local organisations but two examples indicate some of these activities. The UFT in New York City established a Performance Certification Committee which reported in March 1972 and said, among other things, that they oppose any performance-based certification until validated research has been completed. The estimates they received on the time needed for such research ranged from five to twenty years. The Committee also recommended that UFT cooperate in the development of teacher education programmes, that UFT urge intensive research in teacher behaviour and that the UFT demand an internship programme of three years after graduation with the intern beginning with a half teaching load plus seminars. A somewhat different approach has been adopted by the Maine Teachers Association who require a five year teacher training programme. The MTA seek to reduce the number of persons qualified to teach by combining the demand for a fifth year of "experiential training" in the schools with a demand that the local teacher associations participate in the determination of quotas and in the selection of student teachers in their district. "Concern about entry into the profession is a totally new area of activity for professional associations and ... control can only come into the hands of the profession if individual members are insistent that this happen."(Marvin, J.H.,1974) The approach exemplified by the MTA may develop in such a way as to implement PBTE in the fifth year in the schools or it may be that, irrespective of what the colleges do in their programmes, the teachers associations will implement a performance based requirement in addition to any academic requirements. In any case the actions of the teacher associations are an important factor in the direction that PBTE has taken and will take in the future.

14. Feldman, S.(1972)

DEVELOPMENT OF PBTE

The PBTE movement dates from the commencement of the Elementary Teacher Education Models project. This project began in 1967 when the USOE was considering funding priorities and a group of consultants met on 2 August 1967 to plan the project. A request for proposals was issued by the USOE on 16 October 1967 with a closing date of 1 January 1968. Eighty proposals were submitted and nine were selected for funding. Work began on the models in March 1968 and was to be completed by October 1968 as Phase I of the project. Phase II was a feasibility study of the models to determine the costs, needed research and implications of adopting the models and this phase was begun in May 1969 and completed in December 1969. Concurrent with the second phase, the AACTE conducted seminars and workshops in various parts of the USA to desiminate information about the models. Phase III called for the implementation of at least three of the models to test their ability to achieve their stated goals but funds were not forthcoming from the USOE and this phase did not come about.

Implementation of PBTE programmes has come about in a number of institutions as a result of particular local influences. Federal influence is exerted through the requirement that Teacher Corps programmes be performance based, as are career education and other programmes funded by the USOE and the NIE. Some institutions, such as Florida International University, University of Houston and University of Toledo, have committed their entire teacher education programmes to performance-based procedures although in these cases the top administrators in the teacher education departments were closely connected with the development of a model in the Elementary Teacher Education Models project. Other institutions have implemented PBTE in part of their programmes in response to individual enthusiasts

on their staff or in response to outside pressure from the State agency. A number of teacher education institutions are effectively ignoring PBTE altogether and even those committed in part or wholly to PBTE have staff members who do not support its implementation.

The development of PBTE has been influenced by the numerous factors discussed above but the initial interest in remodelling teacher education was stimulated in large measure by problems of teaching in areas of urban poverty. Some of the reactions to this catalyst were the creation of the Teacher Corps, the National Institute for Advanced Study in Teaching Disadvantaged Youth, Task Force '72 and the Career Opportunities Program and PBTE is the means by which these programmes are to achieve their goals. If teachers are to be held accountable, particularly for the reading ability of their pupils, then teacher education is called upon to produce teachers who are efficient in teaching basic skills and PBTE is a response to that call.

CHAPTER THREE

MODELS OF PBTE

THE 1968 ELEMENTARY TEACHER EDUCATION MODELS

The Elementary Teacher Education Models project produced a massive amount of material in the form of ten reports and eight feasibility studies which Le Baron (1970,p.1) claims "represent the first deliberate efforts at developing comprehensive programs of elementary teacher education."[15] As summaries of the models are available elsewhere I shall not attempt a summary of the individual models but rather comment on aspects of the models.

The ten models produced in 1967 have a certain degree of common features due, in part, to the direction given by the USOE in its call for proposals. In the planning statement drawn up in August 1968 by the USOE it was said

> "Any proposals developed for the programme should include a rationale, a viable theory, specified objectives, and evaluational components. In addition, concern should be directed to individualized instruction, simulation, self-study, the use of multi-sensory media, multiple approaches to the problem of educating elementary teachers, aspects of team teaching, realistic reality-testing laboratory experiences, built-in development, demonstration and dissemination phases, built-in systems and costs analyses, in-service education for all personnel conducting such programmes, and the results should be transportable as models to other elementary teacher-producing institutions. It was felt that since teachers have multiple competencies and multiple as well as sequential effects proposals for such a programme should be geared to how children learn and should also relate to how teachers aid the development of learning strategies and skills in children. It was further felt that associate designs should be stimulated which demonstrate linkages with public schools and community agencies, linkages with graduate schools for teacher educators, and linkages with teacher education preservice producers in addition to the input expected from education-related industrial and systems analysis corporations. It was assumed that the above elements could be implicit in certain kinds of models."
> (Burns, R.J., 1970, pp.1-2)

---

15. See Le Baron, W., (1970), Burdin, J.L. and Lanzillotti, K., (1969), Burns, R.J., (1970) and Joyce, B., (1971).

The features common to the models included an emphasis on systems analysis[16], behavioral objectives, individualization of instruction by the implementation of technological innovations, demonstration of teaching competencies in simulation laboratories or schools and provision for in-service education as part of a lengthy period of professional preparation. Apart from any unifying influence of the USOE Request for Proposals, the teams selected to develop models were seen by Joyce (1971,p.117) to have a similar conception of the teacher:

> "All conceptions shared the following features:
> 1. The teacher was not only described in behavioral terms, but was seen as a behaviorist; a setter of behavioral objectives, user of behaviorally-oriented teaching strategies, and user of behavioral measurement techniques. There were no exceptions to this.
> 2. The teacher was seen as a member of a clinical team, rather than as a lone operator in a self-contained classroom. Specialists were envisioned in most cases.
> 3. The teacher was seen in most cases as working in an environment rich in support systems, especially self-instructional materials. Thus, he functions as a diagnoser and orchestrator rather than as the typical teacher of today."

The models were designed to produce teachers who would have far greater responsibility and capacity to guide children's learning experiences than is common in teachers today. However, the new teachers could not operate in schools staffed and equipped as they are today. The models draw upon a quite limited amount of research on teaching in an attempt to construct teacher education systems to produce teachers in schools a decade after the models were devised.

As an example of the general approach of the various models, the Michigan State University "Behavioral Science Elementary Teacher

---

16. "Systems analysis is a process for relating a program or its parts to the goals envisioned for that program, for using information derived from operation to adjust the program towards its goal orientation, and for designing and selecting alternative approaches based on the particular characteristics of the operating environment." (Le Baron, W., 1970,p.2)

Education Program" illustrates the main features listed above. The use of systems analysis is evident both in the means of developing the model and in the working of the developed model. In developing the model, the Michigan team began with four assumptions about teacher education:

1) that a professional teacher is one who employs a "clinical behavior style of teaching",[17]

2) that the professional foundations of teacher preparation should be based on the behavioral sciences,

3) that students should be taught how to teach and not how to conduct research although they should be able to apply research findings to their teaching practice, and

4) teachers tend to teach as they have been taught.

What is meant by 'clinical behavior style of teaching' is a pattern of behaviour consisting of "six phases: describing, analyzing, hypothesizing, prescribing, treating and observing consequences." (Houston, R.E., 1968,p. A-4) After observing the consequences of the treatment,the teacher then describes the changed situation and so begins another series of phases. Having identified this style of teaching as appropriate for the "product", the team developing the model had then to use this style in the model itself (based on assumptions 3 and 4). The resulting undergraduate programme[18] utilised systems analysis in its evaluation procedure[19] to ensure that the programme as a whole was continually adjusted towards

---

17. For an account of the main features of the Michigan model see Appendix D.1 and for an indication of the importance of the "clinical behavior style of teaching" see Appendix D.1, . . Special Feature number 2.

18. For a brief description of the Michigan programme see Appendix D.1,

19. The programme evaluation is indicated in Appendix D.1, in Special Features numbers 5,12,13,14 and 15.

achieving the specified goals. The actual teaching programme consists of 2,700 modules, each designed to meet a specific behavioral objective.[20] The Michigan model is more obviously behavioral in its approach than some of the other models but all of the models are more or less strongly behavioural in their approach. The Michigan specification of "clinical behavior style of teaching" is unique but all models have some specification of the kind of teacher to be produced by the model.

The emphasis on developing models based on a specification of goals is a common feature of the models but the form in which each of the teams put these goals differs considerably. The ComField model, produced by the Northwest Regional Educational Laboratory, outlined ten propositions[21] from which the model was developed. Of those propositions, numbers 7,8,9 and 10 relate to aspects of systems analysis and numbers 1,2,3,4 and 5 relate to behavioral objectives. Number 6, the emphasis on individualized and personalized instruction, is the educational reason for the use of complex managerial systems which result from propositions 9 and 10.

Alternative procedures for determining the goals of the teacher education programme are provided by the University of Toledo and University of Georgia models. The Toledo staff searched the literature for appropriate statements of goals for teacher education and then presented a committee with a list of goals for their rating.[22] Each of these goals begin with 'Each teacher should be prepared to employ teacher

---

20. Reference is made to the modules in Appendix D.1 in Special Features numbers 8,13 and 14

21 See Appendix D.2.1 for a list of the propositions.

22 See Appendix D.2.2 for a description of the procedure for arriving at the goals, a list of the goals and the ratings given each goal.

behaviors which will help every child...' and are followed by a statement of the desired change in the pupil.[23] From these general goals, considered in primary contexts of "Instructional Organization", "Educational Technology", "Contemporary Learning-Teaching Process", "Societal Factors" and "Research", were derived the behavioral objectives from which 1400 specifications were written. The University of Georgia adopted a somewhat different procedure in that they

> "began with the identification of an educational viewpoint including not only an interrelated system of educational principles, but an accepted list of the goals for the elementary school along with their related objectives. Next, the specific learning behaviors which teachers are to create in pupils in order for them to achieve the objectives were determined. From these the numerous specific teaching behaviors which teachers must perform in order to create the desired changes in pupils were identified. The teachers' behaviors along with other data formed the foundation for the job analysis which in turn was used to develop the specifications." (Johnson, C.E., Shearron,G.F. and Stauffer, A.J.,1968, pp.4-5)

Beginning with a general statement of the overall purpose of education, the Georgia educational viewpoint is stated in terms of the societal goals of the school, the desired features of an instructional programme and some principles of operation . The objectives of the elementary school envisaged in the Georgia model[24] are listed under the headings of 'reading', 'speaking', 'listening', 'composition','social studies', 'mathematics', 'science', 'health, physical education and safety',[25] 'art', 'music', 'media', 'affective' and 'cognitive processes'. From

---

23 For comment on this form of stating the goals see Page 59 .

24. Examples of these objectives comprise Appendix D.2.3 and comments on these objectives is made on Page 58 .

25. Other models did not include sections on physical education.

these objectives were obtained the performance specifications. Each of the models followed the pattern of developing some form of goals from which specifications were obtained but the models differed among themselves as to the manner in which the specifications were stated.

Two examples of the different approaches to stating the specifications of the programmes are those of the University of Wisconsin and Syracuse University. The University of Wisconsin example[26] of a mathematics education element indicates how part of a subject is specified in the form of a flow chart and accompanying instructions. The example of mathematics education element is equivalent in the Wisconsin programme to any of the parts shown in the science education model.[27] This latter model represents the course outline of a subject. The Syracuse University example[28] consists of a flow chart of the modules for Social and Cultural Foundations together with the detailed specifications of one of those modules. The particular example chosen from the many Syracuse University specifications does not have the complex provisions for alternate routes within the module as provided in the University of Wisconsin example. However, apart from the differences in complexity of routes and format of the specifications, there is considerable similarity between the two examples in the use of flow charts, initial decisions as to the relevance of the module, emphasis on application of the material being covered in the module and the use of the post test for diagnostic purposes. The individual modules are required to fit into an overall programme either because a list of teacher competencies must be met or because the institution has formal course requirements for its degree.

26. See Appendix E.1.1

27. See Appendix E.1.2

28. See Appendix E.2.1 and E.2.2

The three examples of overall programmes are those from Syracuse University, Florida State University and the ComField model. The Syracuse programme[29] spans five years, the first two of which are taken up with liberal arts subjects and a liberal education component which consists of interdisciplinary studies in each of the areas of humanities, social science and natural science. The content of each of the parts of the programme are relatively standard teacher education material with the possible exception of the Self-Directed Component of the Junior Year. The task of the student in this component is to describe, in behavioral terms, the changes he would like to see take place in the children he is to teach and to determine what training he requires to accomplish these changes with pupils he teaches in his resident year. The programme as a whole is concerned more with processes than with content and is intended to be largely self-paced for the student.[30] The Florida model also incorporates in-service work as part of its programme although in this case it is for two academic years in the schools and three summer sessions in the university. A student who graduates from this programme will have a M.A. and, apart from being able to teach children of age three to thirteen, will specialise in a particular age group, in a subject area and in one of the differentiated teaching functions. The ComField model is designed to produce "instructional managers" who will supervise the instructional process designed by an "instructional engineer" to the specifications of an "instructional analyst". The programme given as an example[31] is for an "instructional manager" who

29. See Appendix F.1

30. See Appendix F.2

31. See Appendix F.3

will proceed through four levels of certification. The Preparatory Certificate permits entry into the Laboratory phase, the Initial Certificate permits entry into the Practicum, the Continuing Certificate permits entry to career teaching and the Consultant Certificate permits the teacher to be a supervisor of ComField students in the Practicum phase. The competencies required by the programme are specified, in summary, in the example of the ComField model.

All the models incorporate an in-service part in their programme and they specify the behaviours to be demonstrated by the students. The programmes also seek to provide each student with training experiences appropriate for his perceived needs and to do this requires flexible modules and flexible overall programmes together with ready access to considerable amounts of information on the student's performance. To achieve the required individualised programmes has resulted in elaborate management systems.

As is indicated in Appendix G.1, the models produced by the Elementary Teacher Education Models project are management models as well as instructional models. The justification for the development of elaborate management models is, as stated by Joyce (1971,pp.80-1), that

> "With the advent of technologies for developing large and complex information-storage-and-retrieval systems there arrived also the capacity to develop management systems which could coordinate student characteristics and achievement with instructional alternatives and maintain reasonable levels of quality control.... It is safe to say that all the program model teams are comfortable with the idea of management systems and believe that when we learn how to use them we can make education much more flexible and human....They believe that such a technology will eventually not only permit instruction to be tailored to individuals but also will enable the student himself to shape many instructional goals and means."

The ComField model has a management system, the rationale of which is

Appendix G.1, designed to serve ten functions:
Instructional;
1. To organise and coordinate the human and nonhuman resources necessary

to carry out the instructional programme,

2. Policy; Clarify the educational goals of elementary pupils and translate them into a written policy statement for the programme and insure that decisions are made with regard to the stated policy,

3. Adaptation; Provide operational guidelines on the basis of the written policy, recommend modifications of the programme based on feedback or evaluate part or all of the programme and design new written programme specifications and cooridinate the feedback to all parts of the programme,

4. Programme Execution; Establish and maintain effective relationships between the parts of the programme to facilitate the adaptive and support functions,

5. Supply; Supply and maintain equipment,

6. Costing; Conduct regular and systematic accounting for all elements of the programme,

7. Research and Development; Modify instructional system or design new systems, advise and/or assist research conducted within the programme and undertake limited basic research on the principles of instruction,

8. Personnel; Supply staff and students,

9. Information; Collect, store, analyse and synthesise required data,

10. Evaluation; Assess (upon request) the effectiveness, appropriateness and impact of part or all of the programme and supply assessment data to any staff member requesting it.[32]

One of the tasks of the management system which has not been discussed in this survey of the Elementary Teacher Education Models is that of costing the operation of the programmes. It is difficult to provide an accurate estimate of the cost of implementing any of the models developed in this project but the feasibility studies undertaken on eight of the models do

---

32. See Schalock, H.D. and Hale, J.R., (1968, Vol.I,pp.108-127)

give some indication as to what the developers thought it might cost. The example given in Appendix G.2 indicates an overall cost of implementation of US $9,823,750 spread over a six year period, after which the programme must be self-supporting. Unlike the Syracuse cost estimate, the Michigan State University model estimated its costs over a pre-implementation period and a four year implementation period but their costs totaled US $5,887,825. However the main difference between the two cost estimates lies in the greater importance of 'Materials' in the Syracuse costing and the dominance of '[illegible] Personnel' $3,854,350 and 'Support Staff' $857,953 in the Michigan estimates. Whether because of the high costs of implementing any of the models,[33] or because of lack of interest by the Federal Government or for other reasons, none of the models developed as part of the Elementary Teacher Education Models project were funded in the envisioned Phase III of the project. The models were implemented, to a greater or lesser extent, in the developing institutions and served as guides for other institutions who were seeking to redesign their programmes. The models served as a catalyst for the PBTE movement in the U.S.A.

ASPECTS OF SAMPLE PBTE PROGRAMMES

An example of the implementation of some of the features of an Elementary Teacher Education Model in the developing institution is the elementary teacher programme now in operation at the University of Toledo. This institution is one of the few to have committed all its teacher education programmes to the PBTE approach, for most of the universities and colleges that have embraced the PBTE approach have done so in conjunction with traditional programmes. Even the University

33. It has been estimated that the models cost about US $1,300,000 to develop but, notwithstanding claims such as made in the University of Georgia feasibility study that the models would produce teachers at less cost than existing programmes, the call by a committee in 1972 for US $150,000,000 to implement PBTE models seems to have been ignored.

of Toledo's programme[34] is performance-based in its Elementary Education and Secondary Education courses only. The remainder of the programme being outside the College of Education is not yet converted to the performance-based approach. The Education courses indicated in Appendix H.1 are Elementary Education 101 and 102 which constitute the Career Decisions Program in the Freshman year, Elementary Education 320,324 and 328 which are the methods courses in the Junior year and Elementary Education 340 (Elementary Teaching and Learning) and Elementary Education 392 (Student Teaching) in the Senior year. The education courses are set out in modules[35] which aim to provide a degree of individualised instruction. The most striking innovation included in the Toledo programme is the Career Decisions Program for the students just entering the University and considering a teaching career. The main point of the Career Decisions Program[36] is to serve as a means of achieving what was sought in traditional teacher education programmes which had monitors and a course entitled something like "Introduction to Teaching". The modules in the Career Decisions Program include one "Self-Analysis for Career Decisions" and another "Introduction to Career Components". On the basis of these modules the student may be expected to know what areas of specialisation are available and which of those is most suitable for him. The first group of students to undertake the programme, in 1971, rated their school experience as a CDA on a five point scale from Completely Satisfactory (1) 38%, (2) 35%, (3) 18%, (4) 6% to Not At All Satisfactory (5) 2%. The involvement of student and university

---

34 See Appendix H.1

35 See Appendix H.2

36 See Appendix H.3

staff with the schools does not end with the Career Decisions Program but instead the Elementary Education courses, particularly the methods, are taught and evaluated, in part, in the schools with the classroom teacher being involved in both the planning and the evaluation of the student's activity. In addition, the university staff member may be involved in curriculum planning as part of a staff team in the school and also teach a graduate course (for credit) in the school to the teachers on the staff of that school (e.g. on aspects of supervision). A university staff member is assigned as the supervisor to one school and he is responsible for the full range of teacher education activities associated with that school. The Toledo programme illustrates both the implementation of one of the Elementary Teacher Education Models and the increased emphasis on the role of the schools in teaching and evaluation of teacher education courses.

The Florida International University[37] is an example of an institution which has recently opened and which has adopted PBTE from the beginning of its development. The teacher education programme was developed according to six specifications:

1. Competency-based curriculum which "imposes on us the responsibility to identify and express in very specific terms that which is accepted as "best practice" in teaching"; (Sowards, G.W.,1974,p.2)

2. Criterion-referenced evaluation. "Two questions are central here: (1) Are the competencies we have chosen to be developed the appropriate ones?; (2) Do our trainees achieve the stated competencies?" (Sowards, G.W.,1974,p.2)

3. More field-based programmes;

4. Multimedia-based instructional systems;

5. Individualized instruction and self-instruction and

6. Computer- based instructional management system.

---

37. Florida International University opened in 1972.

After the first year of operation a number of difficulties were identified as challenges to the successful implementation of PBTE programme at Florida International University. These difficulties included a lack of a clearly defined set of terms to use in discussing aspects of the programme, a need for a reexamination of the role of professors, teachers in the schools and students, a need for suitable instructional materials,[38] problems of grading and the use of modules in an institution based on courses and time-based assessment and " A need to come to grips with a criterion referenced evaluation scheme and opportunities for performance-oriented settings for evaluation purposes." (Sowards, G.W.,1974,p.4)

The Florida International University programme has a "Core" consisting of three courses "General Teaching Skills Lab I", "General Teaching Skills Lab II" and "Schooling in America". In Lab I the emphasis is on developing objectives, lesson plans, tests and managing classroom discipline. In Lab II the emphasis is on the development of self-concept, commumication skills, interpersonal skills, group interaction skills and understanding pupils with differing cultural backgrounds. As with the Toledo courses, the content of the Florida courses was determined on the basis of specifications of the requirements of teaching rather than on the basis of the content of academic disciplines such as educational psychology or sociology.

The evaluation of the first year of operation of the Florida International University programme was conducted for all courses and; on a five point scale from "very positive" to "very negative" student attitude, the results were;

---

38. Numerous State supported projects are producing various forms of instructional materials for PBTE programmes. An example of such a project is the "Florida Project for Changing Teacher Education Through the Use of Protocol Materials" which produces a catalogue of protocol materials.

performance-based approach	- 80%	very	positive	or	positive,	15%	neutral
credit/no credit grading	- 70%	"	"	"	"	,20%	"
no formal examinations	- 80%	"	"	"	"	,15%	"
relevance of competencies	- 85%	"	"	"	"	,15%	"
self-pacing	-90%	"	"	"	"	,5%	"

> "The data indicate that students generally feel very positive toward performance-based education, as they are experiencing it. As a result of course improvement, not only should attitudes toward specific courses become more positive, but also attitudes towards performance-based education in general." (Gay, L.R., 1973, p.12)

The conclusion, based on the evaluation data, does not seem to be entirely warranted in that between 10% and 30% of the students had either neutral or negative attitudes to aspects of the approach and given the identification, by students in the first year of an innovative programme in a new institution, with the approach adopted by that programme the data is not a reliable guide to student attitudes in an established programme. A difficulty with evaluation of a newly implemented course is that the time and resources needed to devise adequate instruction and to undertake adequate evaluation are not usually available so that an institution has to concentrate its efforts in one area rather than the other. It has been indicated that the Oregon College of Education has one of the best developed evaluation procedures for a PBTE programme.[39]

A trial form of the Oregon College of Education's assessment programme was carried out in 1973 and fully implemented in 1974. The intention is that a total assessment system in a form which will permit its use with known confidence will be completed by 1976. The Oregon College of Education's programme differs from most other PBTE programmes in that it seeks to assess competency at the level of the outcomes to be

28. The Elementary Teacher Education Program at the Oregon College of Education received the AACTE Distinguished Achievement Award for

expected of a certified teacher in the school rather than to assess lower level knowledge or skill outcomes. Instead of basing their programme on relatively low level competencies which are easier to identify, the Oregon College of Education has attempted to resolve the difficulties involved in identifying the competencies required of a certified teacher successfully operating in a school situation and to attempt to assess their students on the basis of those competencies. It was initially anticipated that "performance standards[40] would apply to each competency being assessed" (Schalock,D., 1973,p.18) but this approach was not found to be functional. The Oregon College of Education programme was modified so that College and school supervisors assessed the student teaching by means of a five point rating scale for particular competencies and applied the performance standards to the student's whole performance in the particular demonstration context.

The ability to measure a student's performance in terms of a teaching competence is the second of the two central features of PBTE, the first of those features is the ability to identify the competence to be performed and measured, and the Oregon College of Education programme is significant in that it holds out promise of tackling the problems related to evaluation of student teaching performance.

Another institution to begin a PBTE programme recently is the University of Houston, Texas, which commenced the first phase of the programme in 1973. The programme is to consist of phases (usually of one semester each) as follows: Phase I consists of Curric. and Instr, (C & I) 362 and 430T, Phase II consists of ARE 334 (Art), EED430T (Music),

---

40. See Appendix I.

41. For details of the objectives of these courses see Appendix J.

HPE 334 (Health) and either or both C & I 430T (Multicultural) and FED 361 (Foundations of Education), Phase III will be methods courses and electives and Phase IV is a semester of Internship Teaching. This programme is noteworthy for two reasons; it is based on a students' concerns model developed by F. Fuller and it has a foundations of education component. The competencies required of students are identified much as in other PBTE models but they are ordered on the basis of the Fuller model which postulates that students entering a teacher education programme are more concerned about their own adequacy than concern for the technical skills of teaching or concern for the welfare of pupils. These latter concerns develop after classroom experience and so the Houston programme seeks to make the curriculum more relevant to the students by having the Phase I course focus on issues which relate to the students' question "How adequate am I?" "In short, curriculum decisions involved the identification of teaching skills which students could quickly acquire if they did not already have them." (Phase I Team, 1974,p.4) The second feature of the Houston programme, the inclusion of a foundations course, may be somewhat similar to the third unit of the Florida International University Core "Schooling in America" but information is not currently available for any comparison to be made. The Houston foundations course is perceived by the faculty to be in need of strengthening.

The final example of a PBTE programme which has been implemented is the use of the Prentice-Hall Teacher Competency Development System in part of the course Elementary Education 230, "Principles, Problems and Issues in Elementary Education" at the University of Illinois at Urbana-Champaign. The commercially produced set of 26 self instruction booklets were used on a trial basis in 1973 and on a wider basis in the EL. ED. 230 course in 1974 with the addition of filmstrip material. The titles of the booklets are listed in Appendix K.

which sets out the student rankings of the booklets and the overall increase in student educational assureances as measured by the Prentice-Hall Assurance Index. The ranking of the booklets is somewhat skewed by the fact that booklets 22 to 26 were read by less than half the 16 students participating in the trial course. Of the 21 booklets read by more than half the students, 16 booklets were rated by more than half the students as having either been used in the student's teaching experience or expected to be useful in regular teaching situations. The overall increase in student educational assurances cannot be solely attributed to the Prentice-Hall Teacher Competency Development System as it was used in conjunction with seminars, lesson planning and student teaching experience. As the Prentice-Hall Educational Assurance Test was the instrument used to measure the increase in the educational assurance of the students it was thought by the instructors of the EL. ED. 230 course that the results would relate more to the Prentice-Hall Teacher Competency Development System than to the other variables. While the results of the 1974 course are incomplete and inconclusive, there do not seem to be significant differences in educational assurances measured on the Prentice-Hall Educational Assurances Test between students who used the booklets and those who did not and it may be that any increase is the result of student teaching experiences alone. The instructors feel that, even without conclusive data as yet, the students have a greater depth of understanding of the issues addressed in the booklets if they have used the booklets rather than taken an alternative form of EL. ED. 230.

The Prentice-Hall system is only one of several currently available, Macmillan has published a series of minicourses developed by the Far West Regional Laboratory for Educational Research and Development and many of the larger colleges which have introduced PBTE have produced

modules for their own use and for sale. The availablility of these materials allows an instructor to use the PBTE approach for part or all of one or more courses without committing the whole college programme to the PBTE approach. As such this method may overcome some of the antagonism of the remainder of the staff who do not wish to adopt the PBTE approach but it may cause students some difficulties in adjusting to the differing styles of instruction.

CERTIFICATION

The final section of this chapter is devoted to issues related to certification of teachers and PBTE. At the University level, the introduction of a PBTE programme has not been seen as enabling the faculty to decide on recommendations for certification solely on the basis of modules completed. At the State level, implementation of new criteria for teacher certification has been both a stimulus for implementation of PBTE programmes and a cause of heated debate among educators.

As an example of the attitude of universities toward certification, the University of Toledo Career Decisions Program Module III, Objective 900.08 includes the following statement regarding Toledo's degree requirements:

> "The College of Education may refuse to permit the completion of degree requirements and/or recommendation for teacher certification when a student's scholarship, character, or physical condition indicate incompetence or poor success in teaching." (Career Decisions Program, 1972, p.9)

In most States the means of teacher certification is done by the State education agency on the recommendation of an institution whose programme has been approved by the State education agency. The Toledo programme is an example of a PBTE programme which does not base a recommendation for certification on the completion of

the stated objectives in the modules offerred. Such a PBTE programme may be developed to a stage that the staff felt that any student who mastered the set objectives was worthy of certification and so that certification might be implemented in that fashion. Certification solely on the basis of demonstrated competence in the form of mastery of stipulated objectives may also be implemented by the State education agency. The State education agency may either prescribe the objectives to be included in any approved teacher education curriculum or it may prescribe the objectives of an external examination for the teacher's certificate. In states where the education agency indicated that a set of objectives were to be adopted as the basis of approval of teacher education programmes there has been considerable opposition resulting in modification of the objectives or postponement of their implementation.[42] Nonetheless the modification of state certification requirements has been, and is, a powerful force in support of the implementation of PBTE programmes in colleges.[43] An alternative approach which would enable State education agencies to certify students on the basis of demonstrated mastery of specified teaching tasks and related competencies, while allowing colleges to include whatever they saw fit in their programme, is an external examination for the teacher's certificate. In such a situation a college may seek to provide a curriculum which directly prepares the student for the external examination or the college may provide a wider based offering based on what the faculty perceive as the most useful offering they can provide. Such an alternative would not

---

42. For examples see Appendix A and Andrews, T.E., (1971,p.13). The opposition on the basis of infringement of academic freedom and on the basis of objection to behaviorism is discussed in the following chapter.

43. This approach was suggested to me by Professor H. Broudy who indicated that other professions use an external examination for certification.

infringe on academic freedom nor create the situation where the prescribed objectives were taken to constitute both the minimum and maximum standards to be achieved by students prior to entry into teaching.

COMMENT

An attempt has been made in this chapter to present a survey of PBTE programmes and related features in order to indicate what is actually being done in the name of PBTE, as opposed to what is claimed as being the potential of PBTE. The 1968 Models, with their emphasis on behavioral oriented teacher education programmes designed as a result of systems analysis and incorporating significant elements of student teaching experience and inservice courses, have provided a wealth of material and inspiration for those wishing to implement PBTE programmes. The 1968 Models, like the PBTE programmes which have since followed, are claimed to individualize and personalize instruction for students and by this claim is meant that students can select the modules which seem to them and their advisors to be appropriate and they may pre-test out of those modules or take as long as desired to complete them. The actual PBTE programmes do place considerable restriction on the freedom of student choice of course work and, to that extent, the PBTE programmes often do not live up to some of the more extravagant promises made for them. The advantage of the use of modules as the basis of instruction is offset somewhat in that the student cannot have an individual or personal form of instruction suited to their own interests unless their interests happen to coincide with a module which has already been written and they cannot pursue their interests mid-way through a module if they happen to diverge from the programme already established. The claim to provide individualized and personalized instruction is therefore to be

limited sense and is not always able to be implemented as much as the programme designers might wish. A second feature of the 1968 Models which is shared by the PBTE programmes is a limited amount of theoretical development as a basis for the programme. While different in nature and detail, the theorizing in the Toledo, ComField and Georgia Models is inadequate to support the edifice which is sought and the developers of PBTE programmes have had sufficient immediate practical problems to face without spending time on preliminary theorizing. The result is an insecure foundation for the PBTE programme.

In selecting PBTE programmes as part of the sample for this report the intention was to present aspects which illustrated the innovative features of PBTE programmes and attempts to tackle some of the main problems facing PBTE. A constraint on the selection was the availability of information on the programmes and the opportunity to visit the programme and/or discuss it with a staff member. Only untoward circumstances prevented a visit to the Oregon College of Education but some direct contact was made with each of the other programmes included. The Toledo programme illustrated both the overall approach to implementing a PBTE programme as well as, what appeared to be, desirable innovations in the Career Decisions Program and in general school/university relations. The Florida International University programme indicated some of the aspects involved in setting up a PBTE programme in a new university and difficulties of evaluation. The latter feature was also the focus of attention at Oregon, together with an attempt to come to grips with problems of defining teacher competence in meaningful terms which also were measurable. The Prentice-Hall programme used at the University of Illinois exemplified the possible use of part of a PBTE approach within a general course which is unsympathetic to PBTE.

Generally, those who are committed to PBTE are enthusiastically attacking the practical difficulties involved in endeavouring to create PBTE programmes which will improve teacher education in the USA. Included on the staff of many teacher education institutions are some who are opposed to any change in their established ways or who see their own positions threatened by radical change and so oppose PBTE. Many supporters of PBTE see all opposition to PBTE as examples of obstructionism of the kind indicated above and so approve of the use of such means as certification requirements to sweep aside such impediments. While certification requirements are effective in establishing PBTE programmes it may be that the cost of the use of such requirements may be too great because the new programmes may well simply be the old programmes with a different description. A further cost of the use of certification requirements to promote the implementation of PBTE is that such requirements are subject to political considerations and it may be the case that what is politically desirable may not be educationally desirable and sound educational practice may lose out. While some educators attack PBTE because they object to change and others attack PBTE because they are required to implement it without adequate guidance, the most significant reason for rejecting PBTE is that it is unsound educational practice likely to lead, as House (1972,p.69) says of accountability, to a disaster of the kind produced by payment by results one century ago. House identifies the drive to reduce public expenditure on education and the concentrated effort by teachers to have all students reach a minimum standard of proficiency and no more, as the downfall of payment by results and, by implication, also leading to the downfall of accountability in education. It is to the rebuttal of attacks on behaviorism, to the development of a theory which can account for the whole teaching act, and a refutation of the kind of arguments that House

that defenders of PBTE are called to attend

CHAPTER FOUR

THE PBTE DEBATE

THE RANGE OF THE DEBATE

Debate over PBTE has ranged over many areas including the use of objectives as the basis of teacher education, the emphasis on performance, the details of curriculum and instructional models and methods, accountability, certification and other issues which are related to the PBTE movement but not central to the notions underlying PBTE.

Part of the difficulty with the debate over PBTE is that promoters of the movement have been somewhat prone to promise more than they can deliver with the present state of research and development on PBTE. The Director of the Teacher and Continuing Education Division of the Vermont State Department of Education said, in a presentation to the Vermont House Committee on Education,

> "Performance-Based Teacher Education is a means of making new and experienced teachers more competent in teaching children than they are now and of assuring the taxpayer and parent that in return for a $10,000 teacher salary they will receive competent instruction." (Vail, R., 1973,p.2)

Apart from the ambiguity of this statement, the claim that PBTE is such a means is not yet supported by research evidence, nor by a well developed theory which might promise that such a claim will be able to be fulfilled and, most importantly, not by the ultimate evidence, that is, of PBTE programmes which have produced better teachers. This latter form of evidence is ultimate in that if PBTE programmes were to produce better teachers than traditional programmes and no overwhelming moral or financial reasons could be adduced against the PBTE programmes, then that would be sufficient reason to implement PBTE notwithstanding the lack of other research or theoretical evidence in favour of PBTE. One reason for such

evidence not being available at present is that PBTE programmes have not been going long enough to enable adequate assessment of their graduates. A more difficult problem to overcome before such evidence is available is how to assess which teacher is better than another and whether that superiority is attributable to the form of training received. Partly because of the extravagant claims made for PBTE without supporting evidence, critics have not been reluctant to attack PBTE. D.E. Griffiths (1973,p.1) says

> "Ignoring the lessons of history and proceeding without adequate theoretical foundations, the competency-based teacher education movement is the latest example of an anti-intellectual tradition that prevents teaching from becoming fully professional."

Such a criticism links the PBTE movement with the failures of the elementalist psychology of the 1920's and the Cooperative Program in Educational Administration sponsored by the Kellogg Foundation in the 1950's and decries the lack of an adequate theoretical base. While some of the supporters of PBTE would disagree with the latter criticism, the first publication of the AACTE Committee on Performance-Based Teacher Education concluded that the PBTE movement needed "adequate support for research to strengthen the thin knowledge base, particularly in the field of measurement, upon which it must rest." (Elam, S., 1971, p.23) The AACTE Committee on Performance-Based Teacher Education (1974,p.29), in its final publication, said "while sound in theory, PBTE may prove so difficult in practice that its accomplishments fall far short of its promise.... the Committee believes the potentialities justify a large-scale effort and offers a series of recommendations... for improvements in practice." Given the state of knowledge about PBTE and its underlying theory it is not altogether surprising that part of the debate about PBTE has centred on issues which have nothing to do with PBTE as such but which are linked to the PBTE movement.

EXTRANEOUS ISSUES

The issues which are raised in the debate over PBTE but which do not have any direct relationship with the notion underlying PBTE include dissatisfaction with traditional teacher education programmes, the Hawthorne effect resulting from the implementation of a new programme, the bandwagon effect, the need for enrolled students and funds and the pressures from legislatures and state educational agencies. Statements of dissatisfaction about aspects of the traditional teacher education programme abound in the literature on PBTE butwhile such statements may indicate that some new teacher education programme is needed they do not of themselves provide any support for PBTE in particular. As PBTE is often presented as the alternative to traditional teacher education programmes, the arguments against traditional teacher education programmes may be taken to provide support for PBTE and this is not the case. That the distinction between arguments against the existing programmes and those for specific new programmes may seem obvious it is the case that when one leading developer of a PBTE ppogramme was asked for the reason for the introduction of PBTE on a wide scale into teacher education in the USA he quoted the Hawthorne Effect.[44] Whatever virtue the Hawthorne Effect may have in this respect it is shared by any new teacher education programme and not just PBTE and this point did not seem to be appreciated at the time. Moreover, while the speaker admitted that in implementing PBTE at its present state of development was to undertake a massive research programme with untrained and unwitting researchers he did not think that to be a significant problem as it was not, as was suggested to him, likely to lead to confusion and disillusion and result in a chaotic breakdown of the teacher education

44. In conversation after a session at the AACTE convention in Chicago, February 1974

system. Some other persons involved in teacher education in the USA who either dislike or do not understand the PBTE theory and who have witnessed inadequate teacher education under the guise of PBTE are not so sanguine about the results of implementing PBTE on a nationwide scale without further research.

One of the common accusations against those who support PBTE is that they are simply jumping on the most recent educational bandwagon. Such an accusation may be intended as a criticism of educators who support PBTE because they see it as a way of advancing themselves and/or their institutions in the educational world. Individuals who have talents particularly suited to the PBTE approach may support it for that reason, as those whose jobs are threatened may oppose it for that reason. Colleges have taken up PBTE for reasons which have nothing to do with the excellence or otherwise of PBTE and an example of this is given in the rationale for the STEM Project which stated

> "Within the last year, because of enrollment difficulties and a desire of the college to grow and continue its role in higher education in West Virginia and the nation, the Board of Trustees of Salem, its administrative staff and its faculty have committed themselves to the recruitment and retention of students. As a consequence, members of the Department of Education, with the approval and support of the Administration, have embarked upon the development of a Teacher Education Model which would, not only accentuate recruitment and retention, but continue to build upon the excellence of the existing programs." (Spears, J.R. and McAllister,G.S., 1974,p.i)

The Salem College STEM Project embodies in its published rationale several of the features which critics of PBTE have decried. Apart from the recruitment issue, the STEM Project rationale includes a reference to the role of the state educational agency when it states that the model "attempts to improve our professional sequence in light of the State Department of Education's recommendations." (Spears,J.R. and McAllister, G.S.,1974,p.i) The bandwagon accusation tends to gain force from statements like "STEM challenges us to keep pace with new issues and

emerging national trends." (Spears,J.R. and McAllister, G.S., 1974,p.1) particularly when no further research data is adduced in support of the claims made, in glowing terms, for the STEM model.

Attitudes, such as those expressed by the leading developer of a PBTE programme, and rationales for teacher education programmes couched in terms like that for the STEM Project are the sort of things which may lead critics of PBTE to attack it on the extraneous issues surrounding PBTE. They are also the sort of arguments which persuade teacher educators to adopt PBTE without consideration of the issues central to PBTE. Some of these central issues are considered in the following sections.

THE RATIONALE FOR PBTE

Not all attempts at providing a rationale for PBTE are of the kind published by Salem College and, in particular, F.J. McDonald (1974,p.29) has provided a rationale which attempts

> "to distinguish between the rationale for the content of such programs and that for their design. The rationale for the content derives from a philosophy of education - a philosophy of what children should be educated for - and from diverse models of the teaching learning process.... The rationale for competency based programs derives from concepts about the nature of what is to be learned - teaching competence - and from a model of a system most likely to enhance this acquisition."

McDonald claims that the rationale for the content of the programmes is common to all teacher education programmes. He also claims that, given that what students have to learn is teaching competence, the model of learning which is most appropriate is a cybernetic model which utilises continuous feedback (not reinforcement) to the learner. McDonald (1974, p.25) concludes that

> "the rationale for competency based programs is rooted in the nature of teaching acts. The arguments about the behavioristic character of the movement are beside the point. A behavioral description of performance is necessary if we are to design a program that educates effective teachers. But it is not sufficient."

Two of the main issues in the PBTE debate are raised in this conclusion and they are raised in a manner that would provoke a vigourous response from a critic of PBTE. It is not as though a critic would disagree with what McDonald has said, for example about the nature of teaching acts as the basis for the programmes, or the necessity for a behavioural description of teaching performance, or the fact that the latter description is not sufficient, but rather that the critic is liable to claim that either one agrees with what McDonald has said or one develops a PBTE programme but one cannot do both. The criticism centres on the nature of teaching acts and the insufficiency of a behavioural description of teaching performance.

The objection to basing PBTE programmes on the nature of teaching acts is simply that we do not have a clear notion of what the nature of teaching acts are. If we are to develop PBTE programmes then the prior concern is to undertake research on the nature of teaching acts. The propaganda for PBTE indicates that one of the facts which has lead to the PBTE movement is the work during the past decade on models of teaching. But this work has not produced adequate empirical descriptions of teaching acts and little funding has been available for theoretical research on the nature of teaching.[45]

The main area of debate, irrespective of what McDonald seems to think, is over the behavioristic character of the PBTE movement. Whether a behaviorial description of the desired teaching performance is a necessary but not sufficient feature of a programme that educates

---

45. Kerr, D.H. and Soltis, J.F.,(1974,pp.3-16) provide an example of the kind of research needed before a PBTE programme can be developed but it has come six years after the programmes were begun and has yet to be applied in a programme.

effective teachers or whether it is sufficient by itself or whether it is a disaster for a teacher education programme are matters of debate. R.W. Burns (1972, p.19) gives an account of the behaviorist position when he argues that

> "Teacher education is fundamentally a learning situation for prospective teachers. There can be little argument that learning is an individualized process. Logically then, teacher education should be individualized. Traditionally and presently it is not. Next we should note that the only evidence available to show that an individual has learned something is his ability to perform or do something that overtly demonstrates the learning. Such behaviors or performances provide the quantitative and qualitative data that can be used to structure, sequence, validate and revise teacher-education programs. However, we not only want the teacher to perform; we want him to perform well, or competently. Therefore, we conclude that a teacher-education program should be based on objectives, including (when desirable or necessary) standards of performance.
>
> From a pragmatic standpoint, we recognize the desirability of efficiency and effectiveness in teacher education. Objectives provide the means for measuring accomplishment of these goals. The use of behavioral objectives can make accountability in education a practical reality."

The first four sentences of the quote constitute one argument which does not contribute much force to the claim that teacher education ought to be based on explicit statements of behavioral objectives and this lack of force is due to two reasons. First, there can be little argument that learning is an individualized process for it is not at all clear what 'individualized' is supposed to mean. Second and notwithstanding anything that may be said in answer to the first problem, the argument is such that one of its consequences is that no learning takes place in traditional and present teacher education programmes and this would seem to fly in the face of considerable evidence. The remainder of the first paragraph is an argument which is common to many of the statements in favour of PBTE and which is the subject of much criticism.

The first point of criticism of the argument for the

use of behavioral objectives as the basis of a teacher education programme is that in designing such a programme the major consideration is to produce something that will enable students to become effective teachers. That is, the basis of the teacher education programme is whatever is thought likely to achieve that aim. The restriction of the basis of the teacher education programme to behavioral objectives is not done for that reason at all but rather because such objectives provide the data needed to structure, sequence, validate and revise teacher education programmes. Behavioral objectives have been shown, by this argument, to be the basis of the research measurement to be undertaken on a teacher education programme for programme development purposes. It would seem that the use of behavioral objectives as the basis of teacher education programmes is a case of fitting the education to suit "educational technology", as the term is used by R.M. Gagne (1974,p.3) where he says "a body of technical knowledge about the systematic design and conduct of education, based upon scientific research."[46] In the debate over the use of behavioral objectives as the basis for PBTE programmes the issue is whether the restrictions imposed by the particular method of scientific research on what are to count as acceptable objectives are justified. In particular, whether a teacher education programme should confine its activity to those things which the educational research community say they can measure.

Claims of the great value of behavioral objectives are not lacking and an example is the assertion by P.D. Plowman (1971,p.xxiii) that

46. There is no shortage of examples of education being fitted to "educational technology" in the other sense that Gagne (1974,p.3) uses , that is, the things of education such as tapes, computers , television and textbooks.

> "Behavioral objectives can be instrumental in producing this kind of effective teaching (i.e. improving the behaviour of children). As expectancies, they can formulate and channel activity, so that they are useful tools in guiding and improving both teaching and learning. Those objectives that are of the greatest value not only describe the behavior sought, but also identify expected levels of proficiency, mediating conditions, and methods for assessing whether or not the expected level of proficiency has been attained."

Yet, for all the statements of this kind, E.R. House (1973,p.3) claims that there is not

> "any significant evidence suggesting that elaborate prespecification results in better learning. There are fewer than five studies on the effectiveness of "behavioral objectives" (Stake,1973); and those are equivocal. At least one study indicates that the more attention paid to planning objectives, the less paid to immediate pupil concerns."

If House is correct it would seem to suggest that the efficacy claimed for behavioral objectives as tools for guiding and improving teaching and learning is not based on empirical research findings but rather on some other grounds.[47] In part, the grounds may be of the kind put forward by R.F. Mager (1962,p.4) when he says "With clear objectives in view, the student knows which activities on his part are relevant to his success, and it is no longer necessary for him to "psych out" the instructor." If these grounds are to be used to support the use of behavioral objectives then at least it must be shown that such objectives are clear and if the grounds are to be used to show behavioral objectives to be superior to other kinds of objectives then behavioral objectives must be shown to be clearer than other kinds. Plowman (1971,p.xxvii) says "Behavioral objectives deal with concrete, specific, measurable goals, whereas the non-behavioral deal with

---

47 It should be noted that behavioral objectives are claimed to fulfill three functions, namely 1) direction for teaching and curriculum development, 2) guidance in evaluation and 3) facilitation of learning and only one of these functions is mentioned by House. P.C. Duchastel and P.F. Merrill (1973,pp.63-4) reviewed the research on the use of behavioral objectives for facilitating student learning and found

> "that objectives sometimes help and are almost never harmful.... It would be indeed unfortunate if this review were used in one way or another through overgeneralization to influence or advocate a position with respect to the value of behavioral objectives in their other (and perhaps primary) functions: direction for teaching and guidance in evaluation."

more abstract concepts - philosophic, ideological, attitudinal - which can't easily be measured." The ease of measurement, which is often quoted as a major virtue of behavioral objectives, is not the same as clarity and it was clear objectives which Mager argued for in the quote above. The assumption seems to be that the more specific an objective is with regard to observable behaviour then the easier it is to measure and the clearer it is. Plowman (1971,p.xxvi) argues for the use of both general objectives, usually stated in non-behavioural terms, and specific objectives, usually stated in behavioural terms, but with the following restriction regarding the clarity of the general objectives: "General objectives enhance communication only when persons in the group for whom they are intended translate such objectives into approximately the same specific objectives." If Plowman means by 'the same specific objectives' the specification of the same observable behaviour and the approximation occurring in the differring linguistic formulations of the objectives then his claim is false. For a group of people may specify any number of different observable behaviours which meet the requirements of the general objective.

What is needed for communication to be possible is that the group in question can recognise that the other behaviours specified are of the same kind as that which they specified, that is, they can apply the criteria by which a particular observed behaviour is judged to meet the general objective. The significant thing is not that all persons in the group translate a general objective into approximately the same specific objectives but that they have some sort of general agreement on what constitute the relevant criteria for identifying an instance of the general objective having been met.

To illustrate the claim made above, consider the following objectives:

1. The student will understand the significance of educational philosophy to educational practice;

2. The student will read the relevant work of educational philosophers as part of the procedure for making educational decisions during his career;

3. Under examination conditions, the student will write a statement of the significance of philosophy of education to educational practice which incorporates four of the five main points given in the lectures.

On the basis of Plowman's criteria for objectives , the most valuable of these sample objectives is 3 for it describes the behaviour sought, it identifies the expected level of proficiency and the method and conditions of assessment. Objective 2 does not specify the level of proficiency or the method of assessment and so must be less valuable than 3. As objective 1 does not meet any of Plowman's criteria it must be the worst of these sample objectives to be used as a tool to guide and improve teaching and learning. On the other hand, objective 3 does provide a basis for designing a course and that basis is such that very little effort must be expended to come up with a result, viz., one short lecture in which five main points are stated as succintly as possible and repeated as often as is thought necessary and followed by an examination consisting of one question "What are four of the five points made in the lecture?" If objective 3 is not sufficient by itself as an objective for a course then more objectives could be added and so avoid the charge that such courses must concentrate on triviality. Unless it can be shown that objectives like 3 can specify all the components and links within a worthwhile activity then the addition of more objectives would merely result in huge quantities of trivia. One of the main charges against the use of behavioral objectives is that their use tends to be such that the concentration on what can easily be measured results in the effective teaching and learning of trivia. However, apart from the efficacy of objectives of the kind like objective 3 in providing a basis for instruction, the problem remains as to why such an objective should be set at all. If objective 3 can be seen to be a member of a class of

specific objectives, that is, writing such an examination answer is an indication that the student does understand the significance of philosophy of education to educational practice, and that each of those specific objectives does, to a greater or lesser extent, "reflect the critical factors required for the accomplishment of a goal" (Plowman, P.D., 1971, p.xxii), then one can see why that specific objective can be set. But if one can see why specific objectives of that kind can be set then the advantage of setting one or more of those objectives, instead of giving the overall goal or the set of criteria for selecting specific objectives, needs to be shown. Mager sought clear objectives to enable the student to know what was required of him but if confronted by a huge list of specific objectives, some of which will and some of which will not be tested, the student must still "psych out" the instructor. Nothing is gained by that procedure. If the specific behavioral objectives are thought to be clearer than non-behavioral objectives, such as objective 1, this may be so if each specific objective is looked at individually but not so if the total list is considered. Some specific behavioral objectives may contradict other objectives in the list or two objectives may provide alternative strategies or tactics for handling a situation without there being a further specific behavioral objective regarding the manner of choosing between these alternatives. A list of specific behavioral objectives is not, of itself, a guarantee of clarity any more than a general non-behavioral objective must be obscure.

Sample objective 3, which meets the criteria set out for objectives by Plowman, would also seem to be clear, able to be used to structure, sequence, validate and revise a teacher education programme, suited to measuring the outcome of the programme and generally able to serve as the basis of a teacher education programme. Such an objective by itself is inadequate as a basis of a teacher education programme because the terminal behaviour nominated is trivial. A large number of specific

objectives are required but they may also not solve the problem because the terminal behaviours nominated by each of the objectives may also be trivial. The point of a teacher education programme is not to produce a student who, on command, performs prespecified measurable terminal behaviours. The programme seeks to produce effective teachers and so the measure of success lies in the effectiveness of the teacher in the school. Objective 2 would seem to have more relevance to the teacher education programme than does objective 3, despite the latter's apparent technical superiority. However, objective 2 has two main limitations; the first is that nothing the student does as part of the teacher education programme can count as fulfilling that objective and so is of limited use as a basis for a teacher education programme, the second limitation is that the objective is prescriptive and limiting in a way that goes beyond the moral and technical competence of a teacher educator. Objective 1 does not have either of the limitations indicated as plaguing objective 2 for objective 1 can be measured during the teacher education programme and it does not require a teacher to utilise the understanding so gained. If it can be shown that detailed planning objectives for a teacher education programme are desirable then it would seem that objectives such as objective 1 are as clear, measurable and useful for planning as specific behavioral objectives, such as objective 3, which have been selected as a "critical factor required for the accomplishment of a goal". (Blowman, P.D., 1971, p.xxii) But even if agreement can be reached as to the form of the objectives to be set, such an agreement is useless until the goals of the PBTE programme are specified. The goals of a PBTE programme are to be specified in the form of competencies required of students who are to become teachers and those PBTE supporters, such as McDonald, who are more committed to systems design rather than behavioral objectives as the basis of PBTE are relying on teacher competencies as much as any behaviourist.

COMPETENCY IDENTIFICATION

Irrespective of the favoured learning theory accepted by a supporter of PBTE, such a person can accept the AACTE Committee on Performance-Based Teacher Education's summary of PBTE in that "It stresses careful definition of objectives and it focusses instructional effort through continuous feedback" (Elam, S., 1971,p.22) while also acknowledging that no adequate means of assessing a part or all of a PBTE programme is now available. Without an adequate means of assessment it is impossible to provide any feedback, let alone provide continuous feedback as the PBTE concept requires. The lack of an adequate assessment device is due, in part, to the lack of sufficiently sophisticated measuring instruments but also due, in part, to a clear understanding of what it is that is to be measured. Thus the full thrust of the PBTE movement is thrown on the adequacy or otherwise of the lists of teacher competencies which are produced and upon which PBTE programmes can be based. It may come as somewhat of a surprise to find that, in 1971, the AACTE Committee on Performance-Based Teacher Education should say

> "What is a professional teacher? Primarily, someone who can facilitate learning in pupils (or, more specifically, promote cognitive, affective and psychomotor growth). All of the roles a teacher plays should contribute directly or indirectly to this outcome. It is the promise of PBTE that it constitutes a potentially powerful strategy for enhancing this outcome. One of the humiliating uncertainties that hovers over every PBTE experiment, however, is this: What will be accepted as <u>evidence</u> of successful performance by the teacher candidate? Unfortunately, we do not have even a satisfactory list of the crucial skills and behaviors which a teacher must possess in order to perform reasonably well and to survive in the ordinary classroom with personal satisfaction." (Elam, S.,1971,p.15)

Apart from the questionable assumption that 'promote cognitive, affective and psychomotor growth' is any more specific than 'learning' and also apart from the gratuitous assertion that PBTE is a 'potentially powerful strategy', the wonder is why PBTE supporters have not been humiliated by the lack of an acceptable list of teacher competencies and why the PBTE movement should have been able to proceed without such a list. This is

not to say that such a list should actually exist prior to research being undertaken on the matter but to point out that either there should be strong theoretical grounds for supposing that such a list can be drawn up or else, after seventy years of investigation using several differing models of research design and ten years of research using the model favoured by PBTE supporters, we should be close to having such a list. There are not any generally accepted theoretical grounds for supposing that an adequate list of teacher competencies can be drawn up in the manner now being utilised so the emphasis, or onus of proof, is squarely on the lists actually produced.

There is no shortage of lists, either now completed or being worked on by various groups throughout the USA, but, while they may be the best such groups can produce, they do not appear to be adequate to fulfil the task of providing the basis for PBTE. A major contribution to providing lists of teacher competencies was the detailed specifications of objectives in the ten Elementary Teacher Education Models. Such detailed lists of objectives, up to 2,700 objectives, do not provide a list of the necessary objectives as they allow a degree of student choice as to which objectives they will meet and which they will omit and no indication is given of the relative importance of specific objectives. However, the value of a detailed list of specific objectives is dependent upon the source of those objectives and there seem to be three main sources of such lists. One source is some sort of theoretical model from which the teacher competencies are derived and examples of this approach are the use of "teaching strategies" (Weil, M., 1974,p.117) at Columbia University Teachers College, the specification of "the functions of a certficated teaching position" (Schalock,H.D. and Kersh,B.Y., 1973,

p.2) at Oregon College of Education, and the specification of the "fundamental assumptions about teacher education" at the University of Houston. A second source of a list of teacher competencies is by means of the Delphi teachnique and this method has been extensively used with varying results. The third source of a list of teacher competencies is the existing curriculum in colleges, that is, when faced with a request or demand that the college should implement PBTE the staff produce a list of teacher competencies by transferring the examination questions from the end of the course to the beginning (with suitable linguistic modification) and thus creating the desired list by means of a form of "transubstantiation by semantic incantation." (Broudy, H., 1973,p.10) While this means of solving the practical problem of implementing PBTE is not often admitted to by college staff or adminstrators it is acknowledged by both supporters and opponents of PBTE to be a common occurrence.

48

The inadequacy of the lists currently produced is exemplified by the following items selected from 481 items presented to the 60 educators at the second Illinois Vocational Teachers Competencies Conference in 1972. Of all the items presented only five were considered necessary teacher competencies by 100% of the respondents and after each item has been included the percentage of respondents who regarded the identified competency as necessary for vocational teachers.

"60. Direct student laboratory experiences. (100%)
62. Reinforce learning. (100%)
273. The ability to communicate what is going on. To make visible. Business has a product which is easily observable. Do we? (88.34%)
274. The ability to determine creative and innovative roles. Do we have instruments to identify creativity - non conformity, etc.? Once we have identified a creative individual how do we develop his talents? (75%)
275. The ability to file claim forms to receive approval from state agencies. (58.84%)
276. The ability to perceive the past, present and future and to be able to successfully deal with the present. (80%)
277. Ability needed to anticipate the type of defense needed for presenting a proposal. Build into the proposal prior to submission. (65%)

278. Ability to interact with people with different philosophies and backgrounds." (85%)
(Terry, D.R., Thompson,R.L. and Evans,R.N.,1972, Appendix L)

The items which all respondents agree were necessary competencies do not make sense insofar as they are not written in sentence form and none of the items satisfy the criteria set out by Plowman for behavioral objectives. Items 273 and 274 contain plaintive squeaks in addition to attempting to identify something about communication and creativity. At least item 275 is clear about the trivial competency it identifies although it is not obvious that all 58.84% of the respondents who thought that item 275 identifies a necessary competency for vocational teachers could agree on what would count as satisfying the item. Item 277 is totally lacking in any kind of indication as to the type of proposal a vocational teacher may be thought to need to defend or the criteria by which one might decide whether this competency had been met by a student. One hopes that the 20% who did not accept item 276 as necessary and the 15% who did not accept item 278 acted as they did because they recognised them as being the fatuous nonsense they are. What is disheartening is that so many educators were able to identify these items as being necessary teacher competencies and so suggest that a teacher must reinforce learning when in fact he may either reinforce responses or facilitate learning but never reinforce learning.

Such a list of teacher competencies as that from which the above sample was taken indicates the lower depths of incompetence to which the PBTE movement can sink but does not, of itself, show that more sophisticated educators cannot come up with a better list. The grosser errors are not necessarily avoided in lists drawn up by more sophisticated educators as is instanced by such items as 1.12.02 and 1.13.08 in the list of elementary school objectives contained in Appendix D.2.3. These

were to serve as the basis of a list of competencies for students in the University of Georgia programme. The University of Toledo "broadly defined statement of goals for teacher education" contained in Appendix D.2.2 may be largely acceptable to the 24 respondents and quite probably acceptable in a traditional teacher education programme but goals stated in the form 'Each teacher should be prepared to employ teacher behaviors which will help every child acquire (or understand, etc.,)....' without detailed specification, backed by evidence, of which behaviours do help every child to achieve what is intended, are hardly goals upon which PBTE can place much reliance. Even the much referred to Florida Catalog of Teacher Competencies compiled by N. Dodl has been attacked in the following terms:

> "Examination of the catalog reveals it to be an indefinite portion of an undefined set of vague but tediously classified and cross-classified homilies which even the author views as yet to be "operationalized." The statements have simply been compiled with no attempt to show them to be independent, mutually exclusive, or exhaustive." (Maxwell, W.D., 1974,p.308)

It is not necessary that all lists of teacher competencies be a series of nonsense items or homilies and the University of Massachusetts Elementary Teacher Education Model programme[49] contains an example of two differing forms of specification of competencies. In the section outlining part of a music programme the aims indicate the competency to be demonstrated and in the social studies section the competencies are included under the heading 'criterion'. Each of these competencies is specific and an indication is given as to how they may be taught and tested but whether each competency is necessary for a teacher or why they might be thought to be necessary is not made clear. By utilising something like the Massachusetts format of specifying competencies some of the more obvious difficulties encountered with other lists could be

49. See Appendix L.

avoided but the one fundamental problem still remaining is that of showing the identified competencies to be directly related to pupil learning.

The AACTE Committee on Performance-Based Teacher Education claimed that

> "pupil learning is the appropriate criterion for assessing the effectiveness of teacher trainers and training programs; but until relationships between teacher behavior and pupil learning can be more firmly established through research and improved measurement, judgments will have to be made on a priori grounds. There is a danger that competencies that are easy to describe and evaluate will dominate PBTE, hence a special effort will be needed to broaden the concept and to emphasize more divergent, creative, and personal experiences." (Elam, S.,1971, p.23)

The AACTE Committee on Performance-Based Teacher Education (1974,pp.14-5) did not come to grips with the problems indicated in their first paper because in their final recommendations on the issue of identification of competencies they only had the following to say:

> "Recommendation No.1 - A clear description of the roles of the professional to be prepared should be in hand before the instructional program as such is formulated....
> Recommendation No. 2 - Agencies fostering PBTE should provide for the development of several sample lists of generic competencies for widely utilized teaching positions....
> Recommendation No. 3 - There should be a published exchange of views among "the best minds in the field" to explore the feasibility of requiring the same competencies of all teachers or of defined groups of teachers with similar responsibilities."

These recommendations still proceed on the assumption that lists of teacher competencies can be, or have been produced, and that PBTE programmes can be based upon them. Little appreciable progress has been made since 1971 when the first statement quoted above was made and yet these recommendations do not reflect the need for positive research findings on the crucial issue of the relationship between teacher performance and pupil learning. Nor do these recommendations reflect any attempt to come to grips with the type of criticism leveled by Broudy (1972,p.3) that the sum of the parts, that is the specified

competencies, does not constitute the whole or professional teacher. When attempts are made to answer criticism of the kind that Broudy made or similar to that acknowledged as a danger by the AACTE Committee in the quote above, in that PBTE may concentrate on the simple and avoid the important, the tendency is to claim that these important, difficult task of putting it all together is also included in PBTE. While defending the efficiency of PBTE, such defence destroys the theoretical underpinning of the movement by divorcing the preparation of teachers from the strictly specified teacher competencies. If teacher competencies which are known to facilitate pupil learning cannot be specified for the whole or significant section of a teacher education programme then there is no way of testing the efficacy of the PBTE programme and without such a means of verifying the claims made for PBTE as a potentially superior strategy for teacher education one may suspect, with Broudy (1974,p.73) "that either PBTE is innocuous or mischievous."

INNOCUOUS OR MISCHIEVOUS

If the thrust of the PBTE movement is based on the notion of providing explicit specifications of required teacher competencies for teacher education curriculum development and evaluation and for student learning and assessment purposes then the failure to produce lists of acceptable teacher competencies and arguments showing that such lists cannot be produced may be taken to indicate that the PBTE movement is either innocuous or mischievous. The acceptance of the arguments that lists of acceptable teacher competencies cannot be produced leads to the conclusion that the PBTE movement is innocuous and will shortly fade away to join other educational fads which have been allowed a short run before falling into obscurity for some time. The acceptance of those arguments and the failure of the PBTE movement to fade away leads to the conclusion that some other forces underlie the

movement and that no evidence could be brought which might deter those educators engaged in this mischievous research and destroy mission against teacher education. If the arguments adduced against the possibility of producing lists of acceptable teacher competencies are not accepted but the fact of the failure to produce such lists at present is acknowledged then the PBTE movement is innocuous insofar as it is a call for additional research into the matter of teacher competencies and mischievous if it calls for the implementation of PBTE on anything other than an experimental basis. If the PBTE movement results in teacher educators looking at their assumptions and programmes more thoroughly than they would otherwise have done then PBTE is neither innocuous nor mischievous but is instead quite meritorious. However, if all that results is a short-term Hawthorne effect with no ill after-effects then PBTE is innocuous but if there are disasterous after-effects resulting from the broken promises of PBTE then it will have been mischievous. Where PBTE has been tried in colleges with poor quality teacher education programmes and which result in different but equally poor teacher education programmes then PBTE is innocuous unless it diverts attention from other ways of improving such programmes in which case PBTE is mischievous. To the extent that individuals and colleges utilise the PBTE movement to further their own ambitions and to the extent that state education agencies, state legislators and professional teachers organisations use PBTE as a means to gain control over teacher education then the PBTE movement is mischievous in that it cloaks these activities in misleading rhetoric.

---

50. One example of a PBTE programme was described as having been a success because it had equally good results as the traditional programme in terms of cognitive learning and was better than the traditional programme in the affective area. The speaker, when questioned, admitted that the PBTE programme cost 50% more than the traditional programme and also that they did not have any reliable means of assessing affective learning but she did not perceive that these admissions were relevant to her initial claim.

Claims, such as that voiced by Burns,[51] that the use of behavioural objectives will make accountability in teacher education a practical reality, lead many to oppose PBTE. Such opposition is not due to a fear of being held accountable but rather that accountability is all too likely to succumb to the danger of settling for that which is easy to measure and omit the important. One example of the mischievous nature of the PBTE movement to date has been the trend to eliminate the traditional foundations courses in such things as the history and philosophy of education although such elements are included in both the ComField Model[52] and the Syracuse University Elementary Education Model[53] and the experience of the University of Houston with implementing a PBTE programme has lead to a recognition that the foundations course needs strengthening.

The area in which the PBTE movement is clearly neither innocuous nor mischievous is in the emphasis on some desirable reforms in teacher education which are quite independent of the notion of the prespecification of teacher competencies. It seems eminently desirable to include more experience in the school and at an earlier point in the programme than has been the case in traditional teacher education programmes in the USA. The close links between college and schools which are exemplified by the Career Decisions Program[54] of the University of Toledo and the utilisation of schools for work which is an integral part of methods courses appears worthpursuing and worthy of considerable research efforts. The other area with which PBTE has been linked, both

---

51. See Page 7

52. See Appendix F.3

53. See Appendix F.1

54. See Appendix H.3

in the 1968 Elementary Teacher Education Models and in programmes which have since been implemented, is that of inservice education. Many of the programmes which claim to be implementing PBTE also include an inservice element as part of their total programme and Project Change at the State University of New York College at Cortland, which received the AACTE 1973 Distinguished Achievement Award for Excellence in Teacher Education, is primarily an inservice course in early childhood as well as incorporating some prespecification of objectives. While it seems meritorious to increase the links between schools and teacher education programmes for preservice and inservice teachers it is mischievous if this is done under the guise of PBTE and any improvement in teachers thereby resulting from the new innovations be ascribed to the whole PBTE movement. Research on the relative benefits of closer links with schools and prespecification of teacher competencies in the form of behavioral objectives would seem a useful form of research undertaking. Such research would have to avoid making the grievous error of accepting the advice of the AACTE Committee on Performance-Based Teacher Education to make their judgments on the effectiveness of a teacher education programme on a priori grounds.[55] Without any other indications as to what a priori grounds might be relevant to assessing the effectiveness of a teacher education programme, a cynic might feel that the a priori ground which is usually appealed to is that if it is a PBTE programme it must have delivered the success its potential so unmistakably promised.

---

55. See Page 19

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

> "DR. ROSNER: I am continually impressed by the fact that performance based teacher education is heralded as a panacea, that it is publicized as a way to revolutionize instruction. I do not know who authors this kind of publicity other than the elected or appointed officials of state and federal governments who want somehow to see in this movement an opportunity to emasculate the schools of education, to focus on the use of technicians, to save money.
>
> The people with whom I have worked have not tried to sell it as a panacea. We have seen it as an approach to the clarification of much of the ambiguity that presently surrounds teacher education programs. We have seen it as an approach to the introduction of rigorous teacher behavior research. We have not seen it as an approach that will in one fell swoop solve all the problems of teacher education or solve the problems of the public schools - but it is being sold that way. It seems to be that the sellers are the ones who perhaps may be irresponsible - but not the people whom I work with or the writers whom I have read. These people have tried to sell it as an approach to the introduction of clarity and rigor in teacher education....
>
> All of us have a responsibility to look very carefully at where we are, to come to some decision about where we are going, and to make that decision clear and public. Otherwise, politicians concerned with economies will make those decisions for us."
> (Houston, W.R.(ed), 1974,pp.74-8)

CONCLUSIONS

1.1.1 The central notion of PBTE is that teacher education programmes be developed on the basis of careful definition of students' performance goals in assessable terms and guidance of instruction by evaluation of students' performance.

1.1.2 For a PBTE programme to succeed requires a list of teacher competencies which are clearly specified and known to facilitate pupil learning, together with a satisfactory means of evaluating student performance in terms of the specified competencies and a means of providing continuous feedback of the results of the evaluations to the students.

1.2 A PBTE programme is intended to be designed as a whole as a result of systems analysis but the teacher competencies need not be specified

in the form of behavioral objectives. The PBTE programme need not be, but usually is, based on a behaviourist theory of learning.

1.3 No crucial significance is attatched to the use of different names such as Performance-Based Teacher Education (PBTE) or Competency-Based Teacher Education (CBTE).

2.1 Main features associated with, but not central to, the notion of PBTE include an increasing emphasis on close relations between the schools and the colleges of education in the form of early student experiences in schools, college staff participation in school programmes and inservice courses for teachers and an emphasis on restructuring the college curriculum into modules with prespecified objectives .

2.2 A feature associated with PBTE is the attention paid to altering certification requirements for teachers and the political struggle for control over teacher education which accompanies such changes.

3.1 An impressive argument in favour of PBTE is that it is an approach to the introduction of clarity and rigour in teacher education.

3.2 It is in the favour of PBTE that it constitutes an attempt to create or restructure teacher education programmes on the basis of an explicit model of the teacher which is translated into programme objectives, rather than seek to alter or create teacher programmes on an ad hoc basis.

3.3 It is claimed for PBTE programmes that they allow individualized instruction and the student is able to proceed at his own pace to a greater degree than is possible in traditional programmes.

3.4.1 PBTE is conducive to research in that it is seen by its supporters as an approach to the introduction of rigorous teacher behaviour research.

3.4.2 PBTE programmes include a research component within their design to permit the feedback from the student performances to influence the continuing modifications of the programme.

3.5 Where PBTE is implemented in a part of a programme of teacher education, as opposed to the whole programme being performance based, then sections such as teaching practice can utilise the notion without entirely disrupting the remainder of the programme and commercially produced material based on PBTE can be included in traditional courses.

4.1.1 The most immediate criticism of PBTE is that,although a PBTE programme is based on a list of teacher competencies, no adequate list of teacher competencies exists. The danger is that the emphasis on the need to assess the students' performance will lead to trivial competencies being specified

4.1.2 Compounding the difficulty of producing an acceptable list of teacher competencies is the problem that there is no clarity as to what is to count as the appropriate level of complexity of behaviour for the specification of a teacher competency and so the result is a series of lists which include minutely specified competencies to those which include general statements of broad areas of activity.

4.2 A more fundamental criticism is that the PBTE movement lacks a clearly articulated theoretical basis, other than the widely discredited behaviourism, upon which to produce an analysis of a theory of action.and an analysis of teaching and learning to serve as a guide to empirical research.

4.3 In the face of the PBTE claims of the advantages of prespecification of objectives, research evidence has yet to be produced to show those claims to be well founded with respect to student learning and the PBTE programme developers admit that they lack the means to adequately evaluate student performances or the effectiveness of the PBTE programmes so there is a lack of research evidence to support the claims in favour of prespecification of objectives as a means of improving programme design and evaluation.

4.4 Many PBTE programmes seem to have been implemented in advance of

adequate theoretical or instructional materials development and so replicating fundamental research and development done in similar programmes, without having either the resources or skill necessary to carry out the task. The result of such research and teacher preparation does not promise to be any better than, and is likely to be worse than, a well funded research programme undertaken by selected skilled researchers over a long period of time. The 1968 Elementary Teacher Education Models are an example of the rush, shotgun method of research and were a useful strating point for intensive research but were used for implementation. The criticism of rushing the implementation is echoed by the leading supporters of PBTE who see such a rush as likely to destroy any benefits of PBTE.

4.5 There is a lack, at present, of an assessment of the effectiveness or relative cost of PBTE programmes compared to traditional teacher education programmes and so claims made for the superiority of PBTE are largely unsupported by evidence (or theory).

4.6 PBTE is put forward as an alternative to traditional teacher education programmes but in a contracting pool of finances it represents a threat to existing programmes in the competition for funds and may be used as a political tool for power struggles in teacher education.

4.7 A major criticism of PBTE supporters, as distinct from the notion of PBTE itself, is that PBTE is claimed to be able to provide more than the available evidence warrants.

4.8 The fear that the weaknesses of PBTE combined with the zeal of the PBTE supporters and machinations of those who would use PBTE for their own ends, results in an expectation that the PBTE movement will result in creating a form of teacher education similar to the worst form of payment by results and that it will have as devastating results on teacher education as did the payment by results system one century ago.

To avoid the main weakness of PBTE, that is, the specification of trivial teacher competencies, involves a shift away from assessable competencies and thus a shift away from PBTE.

RECOMMENDATIONS TO CLAREMONT TEACHERS COLLEGE BOARD

1. Recommend that the Board do not seek to implement a performance based teacher education programme at Claremont Teachers College nor seek to implement a performance based Education and Psychology programme.

2. Recommend that the Board resist any move to impose specified teacher competencies as the basis of either teacher registration or academic course accreditation.

3. Recommend that the Board instigate an investigation into the desirability and feasibility of the Claremont Teachers College Library obtaining the complete Educational Resources Information Center (ERIC) microfiche collection and serving as the resource centre for this material for the W.A. Teachers Colleges and possibly the other tertiary institutions as well. Funding for such a project would most likely have to be as a special project request to the TEC. An advertisement for one of the ERIC Clearinghouses is included as Appendix M.[56]

4. Recommend that the Board encourage and support the efforts of Claremont Teachers College Staff in the following areas:

(A) Undertake an extensive survey of student and teacher concerns, on the model of that done by F.F. Fuller (1969), to serve as a basis for course sequence decisions.

(B) Undertake a literature survey of the means adopted by methods lecturers to utilise school experiences as part of methods courses and ascertain whether any of the approaches discovered are desirable and applicable to Claremont Teachers College.

---

56. Since this report was typed it was learned that W.A.I.T. has the ERIC system and that the total cost for the microfiche set is about A$6,000 and A$1,000 per year to keep it up to date.

(C) Undertake conceptual research on aspects of theory of action, teaching and learning so as to provide a theoretical basis for Claremont Teachers College teacher education programme design and content.

LIST OF REFERENCES

Allen, D.W. and Coopor, J.M., Model Elementary Teacher Education Program, U.S. Government Printing Office, Washington, D.C., 1968

American Association of Colleges of Teacher Education Committee on Performance Based Teacher Education, Achieving the Potential of Performance Based Teacher Education:Recommendations, PBTE Series: No. 16, AACTE, Washington, D.C., 1974

Andrews, T.E., New Directions in Certification, ATE, Washington,D.C., 1971

Barnes,B., "SIU Firings: Political Purge or Economy Move?", in The News-Gazette, Champaign, Illinois, February 27, 1974,p.23

Benjamin, W., Specifications for a Comprehensive Undergraduate and Inservice Teacher Education Program for Elementary Teachers, U.S. Government Printing Office, Washington, D.C.,1968

Bloom, B.S. (ed), Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook 1: Cognitive Domain, McKay, New York, 1965

Bosley, H.E., Teacher Education in Transition, Multi State Teacher Education Project, Vol. 2, Baltimore, 1969

Broudy, H.S., A Critique of Performance-Based Teacher Education, PBTE Series: No. 4, AACTE, Washington,D.C., 1972

Broudy, H.S., "Why Oppose "Performance Based Teacher Evaluation" and "Competency Based Teacher Evaluation"?, in Society of Professors of Education Newsletter, 1973, (also in Houston, W.R. (ed)., (1974))

Burdin, J. and Lanzillotti, K., A Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers, AACTE, Washington, D.C., 1969

Burns, R.J., "Teacher Education Models - An American Experiment", in The Forum of Education, Vol. XXIX, No. 1, March 1970, pp.1-9

Burns, R.W., "The Central Notion: Explicit Objectives," in Houston, W.R. and Howsam,R.B., Competency Based Teacher Education, SRA, Chicago, 1972

Career Decisions Program, College of Education, University of Toledo, Ohio, 1972

Conant, J.B., The Education of American Teachers, McGraw-Hill, New York, 1963

DeVault, M.V., Wisconsin Elementary Teacher Education Project, U.S. Government Printing Office, Washington, D.C., 1969

Dickson, G.E., Educational Specifications for a Comprehensive Elementary Teacher Education Program, U.S. Government Printing Office, Washington, D.C., 1968

Duchastel, P.C. and Merrill, P.F., "The Effects of Behavioral Objectives on Learning: A Review of Empirical Studies," in Review of Educational Research, Vol. 43, No. 1, Winter 1973, pp.53-69

Elam,S., Performance-Based Teacher Education: What is the State of the Art? PBTE Series: No. 1, AACTE, Washington, D.C., 1971

Encyclopedia of Educational Research, "Teacher Education", 1969

Feldman, S., "Report of Performance Certification Committee", United Federation of Teachers, New York, 1972 (mimeo)

Flanders, N., Analyzing Teaching Behavior, Addison-Wesley, Reading, Mass. 1970

Fuller, F.F., "Concerns of Teachers: A Developmental Conceptualization", in American Educational Research Journal, Vol. VI, No. 2, March 1969, pp. 207-226

Gage, N.L., (ed), Handbook of Research on Teaching, Rand McNally, Chicago, (1963, 1973)

Gagné, R.M.,"Educational Technology and the Learning Process", in Educational Researcher, Vol. 3, No. 1, January 1974, pp.3-8

Gay, L.R., "Evaluation: Data Collection, Analysis, and Reporting", in PBTE, Multi-State Consortium on Performance-Based Teacher Education, Vol.2, No. 5, November 1973,pp.10-12

Gardner, B. and Hall, W., "Preliminary Report from the University of Illinois at Urbana-Champaign on the use of Prentice-Hall Teacher Competency Development System in a student teacher program", 1974 (mimeo)

Griffiths, D.E., "The Dean's Report: Part 1", in New York University Quarterly, Vol. V, No.1, Fall 1973, pp.1-6

House, E.R., "The Price of Productivity: Who Pays?", in Today's Education, Sept/Oct 1972, pp.65-69

Houston, W.R., Behavioral Science Elementary Teacher Education Program, U.S. Government Printing Office, Washington, D.C., 1968

Houston, W.R., (ed), Exploring Competency Based Education, McCutchan, Berkeley, California, 1974

Houston, W.R. and Howsam, R.B., Competency-Based Teacher Education, SRA, Chicago, 1972

Johnson, C.E., Shearron, G.F. and Stauffer, A.J., Georgia Education Model Specification for the Preparation of Elementary Teachers, U.S. Government Printing Office, Washington, D.C., 1968

Joyce, B.R., "The Promise of Performance (Competency) Based Teacher Education: An Analytical Review of the Literature and Experience", ERIC Clearinghouse on Teacher Education, ED 083147, 1971

Joyce, B.R. and Weil, M., Models of Teaching, Prentice-Hall, Englewood Cliffs, N.J., 1972

Kerr, D. and Soltis,J., "Locating Teacher Competency: An Action Description of Teaching," in Educational Theory, Vol. 24, No.1, Winter 1974, pp.3-16

Kirst, M.W., Issues in Governance for Performance -Based Teacher Education, PBTE Series: No. 13, AACTE, Washington, D.C., 1973

Le Baron, W., Analytic Summaries of Specifications for Model Teacher Education Programs, U.S. Government Printing Office, Washington, D.C., 1970

Lessinger, L.M., Every Kid A Winner: Accountability in Education, SRA, Palo Alto, Claifornia, 1970

Lessinger, L.M., "Lessinger:'Not Accountable for Accountability'", in Education U.S.A., Vol. 16, No. 21, 21 January 1974,p.111

Mager,R.F., Preparing Instructional Objectives, Fearon Publishers, Palo Alto, California, 1962

Marvin, J.H., "Circular to Presidents of Local Teachers Associations", Maine Teachers Association, Augusta, Maine, February 21, 1974 (photocopy)

Maxwell, W.D., "A Case of the Emperor's New Clothes", in Phi Delta Kappan, Vol. 55, No.5, January 1974, pp. 305-311

McDonald, F.J., "The Rationale for Competency Based Programs", in Houston, W.R.,(ed), Exploring Competency Based Education, McCutchan, Berkeley, California, 1974

Nash,P., A Humanistic Approach to Performance Based Teacher Education, PBTE Series: No. 10, AACTE, Washington, D.C., 1973

Phase 1 Team, "Competency Based Teacher Education - A Preliminary Report", College of Education, University of Houston, Houston, Texas, 1974 (mimeo)

Plowman, P.D., Behavioral Objectives: Teacher Success Through Student Performance, SRA, Chicago, 1971

Richardson, J.A. and Bowen, J., The Preparation of Teachers in Australia, Cheshire, Melbourne, 1967

Rosner, B. and Kay,P.M., "Will the Promise of C/PBTE be Fulfilled?", in Phi Delta Kappan, Vol. 55, No. 5, January 1974, pp.290-295

Schalock, H.D., "The Impact of Competency Definition on Teacher Preparation Institutions", Teaching Research Division, Oregon State System of Higher Education, 1974 (mimeo - also in Educational Leadership, January 1974)

Schalock, H.D. and Hale, J.R., A Competency Based, Field Centered, Systems Approach to Elementary Teacher Education, U.S. Government Printer, Washington, D.C., 1968

Schalock, H.D. and Kersh, B.Y. and Garrison, J.H., "From Commitment to Practice in Assessing the Outcomes of Teaching: A Case Study", Oregon College of Education, Monmouth, Oregon, 1973, (mimeo)

Schmieder, A.A., Competency Based Education: The State of the Scene, PBTE Series: No. 9, AACTE, Washington, D.C., 1973

Schmeider, A.A. and Yarger, S.J., "Teacher/Teaching Centering in America", in Journal of Teacher Education, Vol. XXV, No.1, Spring 1974, pp. 5-12

Smith, B.O., et. al., Strategies of Teaching, University of Illinois, Urbana, 1967

Smith, B.O., et.al., Teachers for the Real World, AACTE, Washington, D.C., 1969

Sowards, W., A Model for the Preparation of Elementary School Teachers, U.S. Government Printing Office, Washington, D.C., 1968

Sowards, G.W., "Florida International University: One Year in Retrospect", in PBTE, Multi State Consortium on Performance Based Teacher Education, Vol. 2, No. 5, November 1973, pp.1-3

Spears, J. and McAllister, G., "The STEM Project: Salem Teacher Education Model", Salem, West Virginia, 1974 (mimeo)

Stinnett, T.M., "Teacher Education, Certification, and Accreditation", in Fuller, E. and Pearson, J.B., Education in the States: Nationwide Development Since 1900, NEA, Washington, D.C. 1969, pp. 383-437

Terry, D.R., Thopson,R.L. and Evans, R.N., Competencies For Teachers: Vocational Education Shows the Way, Final Report of Project No. PDT -A2 - 171 for the United States Office of Education and the Office of Superintendent of Public Instruction, 1972

University of Toledo, "Competency Based Teacher Education Program: Elementary Teaching and Learning IV, 312:340", Toledo, Ohio, 1973 (mimeo)

Vail, R.B., "Need to Slaughter Some Sacred Cows", in PBTE, Multi State Consortium on Performance Based Teacher Education, Vol. 2, No. 4, October 1973, pp. 1-2

Weber, W., A Study of the Feasibility of the Refined Syracuse University Specifications for a Comprehensive Undergraduate and Inservice Teacher Education Program for Elementary Teachers, U.S. Government Printing Ofiice, Washington, D.C., 1969

Weil, M., "Deriving Teaching Skills from Models of Teaching", in Houston, W.R., Exploring Competency Based Education, McCutchan, Berkeley, California, 1974

...ss, R.M., The Conant Controversy in Teacher Education, Random House, N.Y. 1969